Savings at the Frontier
Evidence Mapping on Informal Savings Mechanisms

Elisabeth Resch, Oxford Policy Management

June 2017
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<tr>
<td>ASCA</td>
<td>Accumulating Savings and Lending Association</td>
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<td>BFA</td>
<td>Bankable Frontier Associates</td>
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<td>CIK</td>
<td>CARE International (Kenya)</td>
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<td>CRS</td>
<td>Catholic Relief Services</td>
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<td>DBL</td>
<td>Double Bottom Line</td>
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<td>EIU</td>
<td>Economist Intelligence Unit</td>
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<td>FA</td>
<td>Field Agent</td>
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<td>FAI</td>
<td>Financial Access Initiative</td>
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<td>FFH</td>
<td>Freedom from Hunger</td>
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<td>FII</td>
<td>Financial Inclusion Insight</td>
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<td>FITS</td>
<td>Financial Inclusion Tracker Study</td>
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<td>FO</td>
<td>Field Officer</td>
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<td>FSP</td>
<td>Financial Services Provider</td>
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<td>GAFIS</td>
<td>Gateway Financial Innovations for Savings</td>
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<td>GSL</td>
<td>Group Savings and Loan</td>
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<td>ISMs</td>
<td>Informal Savings Mechanisms</td>
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<td>KYC</td>
<td>Know Your Customer</td>
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<td>MFI</td>
<td>Microfinance Institution</td>
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<td>MNO</td>
<td>Mobile Network Operator</td>
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<td>MREL</td>
<td>Monitoring, Research, Evaluation and Learning</td>
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<td>NGO</td>
<td>Non-Governmental Organisation</td>
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<tr>
<td>OA</td>
<td>Oxfam America</td>
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<td>OPM</td>
<td>Oxford Policy Management</td>
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<td>PSP</td>
<td>Private Sector Provider</td>
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<td>RCT</td>
<td>Randomised Control Trials</td>
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<td>RFI</td>
<td>Rural Financial Institution</td>
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<td>ROSCA</td>
<td>Rotating Savings and Credit Association</td>
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<td>SatF</td>
<td>Savings at the Frontier</td>
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<td>SfC</td>
<td>Savings for Change</td>
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<td>SG</td>
<td>Savings Group</td>
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<td>SHG</td>
<td>Self-Help Group</td>
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<td>SILC</td>
<td>Savings and Internal Lending Community</td>
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<td>TMMTS</td>
<td>Tanzania Mobile Money Tracker Study</td>
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<td>VA</td>
<td>Village Agent</td>
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<td>VSLA</td>
<td>Village Savings and Loan Association</td>
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Executive summary

SatF is a five and a half year (2015-2021) partnership between The MasterCard Foundation and Oxford Policy Management to improve the financial inclusion of low-income individuals and communities in sub-Saharan Africa (SSA). The programme is working directly with and funding selected Financial Service Providers (FSPs) in our three focus countries – Ghana, Tanzania and Zambia.

This document maps the existing evidence on the demand for and supply of financial services for SGs in order to discover which services and channels are most valued by the financially disadvantaged and what drives the business case for providers to serve them. The overall objective of the exercise was to review the literature in this area in order to distill information for practitioners seeking to work in this market, and also to encourage researchers to address the gaps in evidence that have been identified. The review might also inform FSPs about avenues for extending their reach to a potential new market segment – low-income customers in peri-urban and rural areas. SatF believes that sustainable financial inclusion to the last mile needs to be driven by the commercial sector and it is therefore critical for banks to understand new segments and expand rural reach.

Informal savings methods of the unbanked

In recent years, there have been efforts to explore the financial needs and practices of the unbanked. The most recent consensus among researchers and practitioners is that the potential of the poor as users of financial services and the complexity of their financial lives has been underestimated. Rutherford and Arora’s (2009) The Poor and their Money sheds light on the unexpectedly sophisticated financial lives of the financially underserved, finding them ‘creating complex "financial portfolios" of formal and informal tools’.

While coverage of financial services’ consumption patterns and attitudes varies from country to country, a general observation that can be made is that in developing economies and particularly among poor people a common alternative and addition to saving at a financial institution is to save informally. Informal savings mechanisms (ISMs) include cash savings and investments in kind made in order to save, as well as savings groups (SGs) and leaving savings with a person outside the immediate family (relatives, neighbours, etc.).

On the virtues of SGs

SGs are among the informal tools that the unbanked use in different forms and to varying degrees in developing countries. There are peer-reviewed studies as well as findings from project and programme evaluations that shed light on what SG members value about their membership. Financial diary studies have been found to be the most helpful way of exploring consumer patterns but these have only been conducted in a few countries, including Kenya and Malawi. Individuals are often members of more than one SG, a situation that could present both advantages and risks.

There is also evidence (in the form of experimental studies) on what behavioural changes can be observed in individuals after joining a SG – the most prominent observable change being the increase in savings and credit volumes per member. Several experimental studies have been undertaken to study the impact of SGs on savings, particularly for consumption, productive/income-earning investments, children’s education and medical needs. Studies on the use of funds describe the use of loans granted by existing SGs, the

1 http://www.portfoliosofthepoor.com/
spending of the share-out and the use of the social fund. There has been less research on how participation in an SG affects the forms in which individuals save, that is, long versus short term. It could be argued that asset ownership is a form of saving as well as investment, and there are studies on this. Findings on the impact of SG membership on asset purchases are mixed in the existing randomised control trial (RCT) studies. Linkage to financial services providers (FSPs) as well as facilitation by non-governmental organisations (NGOs) appears to affect asset ownership.

Whether savings accounts present an addition to the portfolios of their members or whether they replace other forms of savings has been debated. Results are divided. For example, some findings suggest that facilitated SGs crowd out other types of SGs. This represents an area for further research.

Beyond the financial benefits of SG membership, studies (other than RCTs) indicate that SG members also value the sense of inclusion and community that comes from participating in SGs. However, it is important to note that, while also cited as a benefit in anecdotes, enhanced social capital was not captured at all by the RCTs. It seems quite conceivable that such social impacts exist but RCTs are unable to capture them. In facilitated groups, there are reports of training provided by facilitators being highly appreciated by SG members.

How members would access these non-economic benefits in the absence of SGs depends on the type of non-economic benefit. There is no evidence addressing this question explicitly in the literature and the savings discipline that is instilled into members by the group could be provided by other means. There are studies simulating the peer effect as well as other features of SGs.

Potential of financial and digital linkage

The results of surveys and consumer attitudes allow the greatest insights into the question of what members see as the limitations and advantages of SGs. Financial diaries as well as surveys on the subject of bank accounts among SG members shed light on their needs and fears. FSD Kenya’s Quality of Delivery study provides the most useful results on members’ attitudes about SGs. Repayment difficulties were perceived as the biggest drawback of SGs.

Financial diaries reveal that the main reasons SG members want a bank account are: safety of savings, access to credit, and the wish to build a credit history. There are some shortcomings of SGs that were not mentioned by respondents but were arrived at through further analysis of findings by Bankable Frontier Associates (BFA). These include the inability to build lump sums, cash shortage at the beginning of the cycle, and SGs’ limited ability to counter risks being shared with other SG members.

What about perceptions of banks and/or financial linkage? Advocacy organisations, including the authors of the Banking for Billions report (Barclays and EIU, 2010), state that SGs want to link. It is, however, impossible to prove this conclusively. Anecdotal evidence by CARE International shows that SG members across different countries share common perceptions and misconceptions about the possibility of financial linkage.

In addition to consumer perceptions, what will drive uptake of formal financial services (by SGs and other informal savers) is the cost and convenience of usage. In this regard, alternative delivery channels and financial literacy are particularly

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2 What is a share out? Groups save and borrow over the time period of a savings cycle. At the end of every cycle, the accumulated savings and interest earnings are distributed (i.e. “shared out”) amongst the members. After each share-out, groups start another cycle. Members may decide to make an exceptional savings contribution right after share-out to re-capitalise the loan fund.

3 The social fund is an insurance fund that some savings groups use for emergency and social purposes in accordance with rules set by the group. The social fund is kept as a separate fund. Typically, any member may request a grant or interest-free loan (to be disbursed immediately) from the fund pending approval from group members.
relevant. Well beyond just SGs, alternative delivery channels have dramatically affected people’s access to formal and informal financial services, in some countries more than in others. The emergence of alternative channels has been widely covered by experts and in some academic literature (including RCTs). As far as the impact on users is concerned, mobile money has been covered most extensively. There is evidence of digital linkage of facilitated SGs in Burkina Faso using mobile phones.

There are many studies – including experimental ones – that cover which means of learning about formal financial services have worked best for people. However, they are not necessarily limited to SGs: they also include other previously unbanked customers. NGOs that assist SGs in financial linkage are likely to include financial education for SG members. Their experience with different learning modules will be instructive.

The business case for financial linkage for FSPs

What drives the business case for providers to serve the financially disadvantaged? In their analysis of the business case of linking SGs to FSPs and mobile network operators (MNOs), BFA conclude that the digital linkage of the SG as well as of its individual members is the linkage model most likely to result in an incentive structure that is attractive to SGs and their members, MNOs and FSPs. This model is based on various assumptions on acquisition cost, client cost and cost of linkage. The purpose of this evidence mapping is to test the assumptions underlying BFA’s analysis and gather evidence for its business case as well as supplement the BFA research.

It is difficult to find studies that support the business case for linking ISM users to a financial institution or a mobile payment system. There is limited information on market segmentation of users of ISMs and how different segments respond to financial opportunities. Surveys or consumer studies on what members value about ISMs do exist but are not broken down by types of ISM and facilitation modes. FSPs’ data on cost structures, liquidity demands and marketing channels are scarcely shared. While financial products for SGs (conditions, limits, fee structure, cost) can and have been studied, FSPs are unsurprisingly reluctant to share certain company information.

The cost of acquiring a SG (and its members) as customers is a vital consideration in market entry strategies, and as yet this is understudied. There is evidence of the effort of linkage and some anecdotal data on account opening costs from selected projects. However, there is little information about the cost of acquiring clients via SGs. In studying account acquisition costs, the challenge will be to compare different SG linkage models.

The question of whether customer acquisition via SGs is more effective than individual customer acquisition has been explored. There are considerable hurdles to financial linkage. Despite these, the agglomeration effect of SGs makes marketing campaigns by promoters particularly effective. Moreover, there are factors that mean that SG members are more likely than individuals to be linked to a financial provider (e.g. religious and cultural factors, peer effects being stronger in youth groups, etc.).

From the existing evidence, it cannot be said whether financial linkage of SGs performs better in terms of customer retention compared to other products. There are studies on the linkage experience and satisfaction rates with financial linkage. Moreover, there is evidence on what drives survival and drop-out rates for SGs. However, there is no comparison of whether SG members are more loyal bank customers – once linked – than others.

There is research (albeit not exclusively on SGs) on harnessing mobile phone data, where available, to assess credit risk. No publicly available research compares the robustness of mobile data usage for assessing credit scores to that of deriving credit scoring from internal transactions in SGs. While data on the reliability of this method were not publicly shared, their widespread use is a testament to the potential for linking informal savers to formal financial services.
Given their importance for sustainable service delivery, there are studies on different village agent models – some anecdotal or in the form of project evaluations and technical series by facilitating agencies, and others in the form of peer-reviewed studies. Differing inclinations on investment and use of credit and savings for investment as a result of the delivery model certainly have implications for the choice of financial linkage model of FSPs and SGs.

Product offer and pricing

Users of ISM require a tailored product that exceeds the ISM in affordability, convenience and safety if they are expected to switch. This may include a variety of services ranging from (mobile) payments to insurance. While the ideal product offer will depend on the market as well as the provider (for example, MNO versus bank), a question that is relevant to most is whether there is an incentive for FSPs to provide credit to customers exclusively or too early on. It has been found that there is an incentive for FSPs to lend to SGs rather than offer a broad range of services to them. For FSPs, the potential interest income from providing credit typically far exceeds the potential float income from savings account balances. There is evidence of failed financial linkages of SGs, many of which were attempts driven by hastened or unsustainable shifts to credit. It has been pointed out that SGs and their members may have limited capacity for investment and debt and that the product offer should therefore be adjusted. In this regard, various NGOs give guidance on what product features are advisable – both in terms of consumer protection and reaching scale.

There is little information available regarding pricing. Detailed cost structures are hard to find as private providers typically do not share them. No information on the capacity of double bottom line (DBL) organisations or other financial intermediaries to price at break-even point was found. What has been observed is that administrative costs are the main cost component in the microfinance institution (MFI) business model.

It was not possible to see which services could be provided at break-even level from a review of the service offer in the group product market. However, the State Of Linkage Report (Barclays, Plan UK and CARE International, 2016) lists a number of services that are typically or often features of SG products and that are provided for free or at low cost. These are SMS notifications, internet banking, ATM cards, free withdrawals, group passbooks, no account fees and no minimum balances. A number of NGOs that facilitate group formation have recommended that in cooperation with an MNO FSPs should absorb the cost of going digital for SGs and their members. Whether these features can be provided at a low cost to the FSP remains uncertain.

FSPs

The State Of Linkage Report provides an overview of the providers of financial products for SGs. They found that the main distribution network of linkage products was the banks (67%). Retail banks rather than MFIs make up the market and local banks are the drivers.

The cost of forming or facilitating SGs and linking to SGs are an important factor. There is little available information on customer acquisition costs. Some examples are known in which an NGO funded the expenses for linkage and there are details of the cost incurred; however, there is very little information available on the cost of linking SGs (existing or newly formed) to FSPs. Perhaps case studies on business models focused on clients at the bottom of the pyramid could be helpful here.

In the group product market, MNOs face certain limitations – these limitations are particularly restrictive for SG access as the amounts saved and withdrawn are higher than for individuals. While MNOs can provide attractive incentives for customer acquisition, there are limitations in terms of the liquidity challenges the operators and associated agents face. That said,
numerous SG deposits and withdrawals may provide a source of liquidity management for MNOs or banks that manage agent channels. No evidence on the propensity of one linkage model (FSP and SG) versus another (FSP, MNO and SG) to deliver better liquidity performance was found.

**In terms of development impact, how do MFIs perform versus commercial banks?**

There were no data on the aid or development effectiveness of the different linkage models available. Such data will emerge as more and more linkage models are evaluated.
1 Background

SatF is a five and a half year (2015-2021) partnership between The MasterCard Foundation and Oxford Policy Management to improve the financial inclusion of low-income individuals and communities in sub-Saharan Africa (SSA). The programme is working directly with and funding selected Financial Service Providers (FSPs) in our three focus countries – Ghana, Tanzania and Zambia.

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Part of The MasterCard Foundation’s focus is to facilitate internal learning in order to underpin adaptive evidence-based programme management, ensure external accountability to stakeholders, and contribute to an expanded global knowledge based on what works and what does not in the course of the SatF programme. To this end, the Monitoring, Research, Evaluation and Learning (MREL) function of the project strives to answer learning questions about the following three categories:

1. Clients: Which financial services and channels are most valued by the financially disadvantaged?
2. Institutions: What drives the business case for providers to serve the financially disadvantaged?
3. Ecosystem: What does an enabling environment look like and what is the appropriate role for funders to play in supporting it?

The purpose of this review is to map evidence and data on the questions surrounding clients and institutions.

We have mapped the evidence in academic and grey literature on ISMs, in particular SGs.

A series of research questions (see Annex 1) was posed and answers sought in the existing literature. Building on the evidence mapping in Section 2, we have identified gaps in the body of research and fields that need addressing (discussed in Section 3). Topics discussed range from an overview of ISMs and their impact (both economic and non-economic) on users to the potential of linkage of users of informal services to formal financial services via digital means. In the area of institutions, we explore the business case for linking these users to financial intermediaries and gather the evidence on its assumption. Ideal product offers and pricing are discussed as well as the eligibility of FSPs to serve the underbanked. As a result, learning questions were derived that can be found in the final subsection (section 3.1).
Evidence mapping on the research questions

2.1 ISMs of the unbanked

In recent years, there have been efforts to explore the financial needs and practices of what have been termed ‘the unbankable’. The most recent consensus among researchers and practitioners is that the potential of the poor as users of financial services and the complexity of their financial lives has been underestimated. Barclays and the Economist Intelligence Unit’s (EIU) The Poor and Their Money (2009), Banking for Billions (2010), Barclays, Plan UK and CARE International’s Banking on Change (2013), Portfolios of the Poor: How the World’s Poor Live on $2 a Day (2009) and various country studies by the FinMark Trust and FinScope are the latest and most prominent in a series of landmark publications on the financial needs and practices of the unbanked. The authors of Banking on Change estimate that if the 2.5 billion identified by the World Bank Global Financial Inclusion (Global Findex) database as ‘unbanked’ participated in savings-led microfinance, they would represent a group of customers with the potential to save US$145 billion a year, thereby contributing a great deal to local and national economies.4

Rutherford and Arora’s (2nd edition: 2009) The Poor and Their Money was first published in 2000 and broke new ground in shedding light on how the world’s poor live on $2 a day. Its insights were the foundation of Portfolios of the Poor (of which Rutherford was a co-author). Based on their experience the authors concluded that poor people want and do save, even if usually in small and irregular amounts. What they aspire to is to accumulate, from their savings, a larger lump sum of money that is useful for many different purposes. Thus, financial services for poor people should provide them with safe, convenient and affordable mechanisms to turn savings into lump sums for a myriad of uses instead of just to run microenterprises. The book describes experiments in delivering basic money management services to poor households, some of which have a long history. The poor seek to turn their savings into lump sums through ISMs, by finding reliable deposit takers, by seeking advances against future savings, or by setting up devices like savings clubs and rotating savings and credit associations (ROSCAs). Over time, ISM users have learned from actors in the microfinance industry: organisations that help the poor set up financial services devices owned by themselves or their communities and providers of (intermediate) financial services to the poor.

Rutherford and Arora find that FSPs are better able to reach large numbers of poor people with innovative products that mirror the experience of the informal sector in that they suit the limited capacity to save and the need for lump sums, as well as providing convenient and affordable product delivery systems.

The Poor and their Money and Portfolios of the Poor shed light on the unexpectedly sophisticated financial lives of the financially underserved, finding them ‘creating complex "financial portfolios" of formal and informal tools’.5

ISMs include cash savings and investments in kind made in order to save, as well as SGs, and leaving savings with a person outside the immediate family (relatives, neighbours, etc.). By far the most common savings methods are saving in cash or in kind.6 Keeping cash at home is a typical form of saving. Advantages include the instant liquidity while disadvantages include the foregone (interest) income and the insecurity (due to savers’ indiscipline and the risk of theft or destruction). About 46% of savers in developing economies reported saving only in some way other than at a financial institution or by using an informal savings club or a

4 www.careinternational.org.uk/linking-for-change/ Note that this number fell from 2.5 billion unbanked in 2011 to 2 billion in 2014, according to Findex: www.worldbank.org/en/programs/globalfindex
5 www.portfoliosofthepoor.com/
6 www.cgiap.org/blog/cash-really-king
Investment in kind can be a form of savings. Savings are typically defined as consumption foregone. Yet there are purchases in long-term, non-depreciating assets that constitute a form of saving. One savings mechanism that is not commonly counted is investing in children’s education or investment in a family-run microenterprise. Unbanked households often seem to put their long-term savings into other forms of capital. An example would be purchase of silver, gold or durable household goods through contributing fixed amounts at regular intervals. The obvious shortcomings of this form of saving are that it is illiquid and indivisible, as well as that the purchased item might be subject to price fluctuations.

SGs are a common informal savings method around the world. One common form of informal savings is a ROSCA. These allow members to accumulate pre-specified lump sum savings amounts. Individuals can often choose to join ROSCAs based on the lump sum amount that they would prefer to accumulate. Groups have a set number of members and agree to contribute a specific amount at specified intervals. At each interval, a member will receive the entire lump sum amount from all individuals as a grant. At the next meeting, a different member will receive this lump sum, and so on until all have received the lump sum once (hence the name ‘merry-go-round’ in some countries). ROSCAs generally do not provide a credit option. As a variation, the accumulating savings and lending association (ASCA) model provides members with an opportunity to save and obtain short-term credit from a common savings pool. ASCAs operate in cycles, usually of one year or less. At the end of a cycle, members receive their individual savings in a lump sum amount, together with their share of the interest paid by members who borrow. In ASCAs, members generally save a set amount per savings period so as to facilitate easy bookkeeping.

SGs go by many names: tontines in Francophone Africa, tandas in Mexico, susus in the Caribbean and West Africa, chit funds in India, whichin gye in Korea, seettuwa in Sri Lanka, bisis in Pakistan, Iddir in Ethiopia, paluwagan in the Philippines, chilimba in Zambia and mujin in Japan to name a few. NGOs seeking to facilitate the formation and maintenance of SGs have also called them by a variety of names, including Community-Based Savings Groups, Village Savings and Loan Associations (VSLAs) and Community-Managed Savings and Loan Groups (Rutherford and Arora, 2009).

Keeping money with a person outside the family such as neighbours is another common informal saving method. It is a practice that helps keep temptation at bay. In many countries, people keep their money with a deposit collector (called a susu collector in West Africa) who charges a fee for safeguarding the money. In India, some savers keep money with work providers and contractors if they are in such an arrangement (Sukhdeve, 2008). Along with SGs, this method is counted under the Global Findex survey.

2.1.1 The importance of informal savings in developing countries

In developing economies – and particularly among poor people – a common alternative and addition to saving at a financial institution is to save informally. The most recent estimates of formal and semi-formal bank accounts can be found in the Global Findex database. In 2014, about 9% of adults — or 17% of savers — in developing economies reported having saved using an informal savings club or a person outside the family in the previous 12 months. Saving informally is especially common in Sub-Saharan Africa, where 24% of adults — or 40% of savers — reported having done so in the previous year. Almost 60% of those who reported

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8 www.financialaccess.org/our-research/
saving semi-formally (14% of all adults) also reported not having a formal account. Roughly half of the adults who saved using an informal mechanism also saved in a formal financial account.

The use of informal savings methods increased between 2011 and 2014. In developing economies the share of adults who reported saving informally, by using an informal savings club or a person outside the family, increased to 9%. The Middle East had the largest increase among regions, though from a very low base: the share of adults who reported saving informally quadrupled, rising from 3% in 2011 to 12% in 2014.

Figure 1: Informal savings by region, 2011 to 2014

The coverage of general financial services consumption patterns and attitudes varies from country to country. Unsurprisingly, some countries have more up-to-date data than others on the financial needs and practices of their populations. FinScope studies give insights into consumer demand for and attitudes toward financial services, including transactions, savings, credit and insurance. The reasons for the exclusion of the poor from financial services vary. The most common reasons given for the exclusion of the poor are: unprofitability due to limited ticket size, lack of credit scores, lack of access to bank branches, a preference for savings (rather than borrowing; the former is less profitable for banks) and a limited capacity for servicing debt, financial illiteracy/unfamiliarity with formal financial services, and a distrust of banks.

Likewise, there is research that analyses trends in the attitudes of unbanked people toward savings, consumption and investment through a behavioural economics lens, and this could be useful for product design. Research by MicroSave (2015) discusses various behavioural factors that affect savings behaviour among unbanked households and individuals, such as status quo bias, hassle factor, hyperbolic discounting, present bias, mental

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9 Global Findex Survey 2014
11 Global Findex Survey 2014
13 Countries in which FinScope studies are conducted include Tanzania, Uganda, Kenya, Rwanda, Malawi, Zambia, Zimbabwe, Mozambique, Botswana, Swaziland, Namibia, Lesotho, South Africa, Nigeria and Ghana. FinScope consumer surveys are currently underway in Rwanda, Togo, South Africa, Madagascar, Cambodia and SME surveys are underway in Lesotho and Swaziland. FinScope Consumer survey India is soon to be launched. Source: www.finmark.org.za/finscope-surveys/
14 For those whose greatest need is access to useful lump sums to manage household cash flow, microcredit is not an option. The 2007 FinMark Trust/FinScope studies of Uganda, Tanzania, and Zambia all indicated a similar hierarchy of priorities for both savings and credit services (in descending order of importance): meeting basic needs, emergencies, education of children, and business investment. Some 15% prefer to use credit and 19% prefer to use savings for these purposes.
15 Selected publications include: MicroSave Briefing Note #155; MicroSave IFN 108; Smith (2009); and Fiorillo et al. (2014).
accounting and planning fallacy. MicroSave’s research sheds light on preferences for informal savings, procrastination about savings commitments, discontinuance of committed savings and preference for fixed-return schemes among unbanked people. Recommendations by MicroSave as to the design of savings products for clients hitherto unfamiliar with formal financial services include: (i) design products aligned to the mental money management model of the clientele; (ii) help unbanked people commit to and start using formal savings mechanisms as tools in their daily life; (iii) enable unbanked people to continue saving at regular intervals; and (iv) assure clients of the security of and return from formal savings (MicroSave, 2015).

What about data on informal savings patterns? The most prominent data sources on informality include the Global Findex studies, which are wide in coverage, Portfolios of the Poor, which summarises several years of research in three countries using the so-called ‘financial diaries’ method, and publications modelled on its example. Other financial diary studies are also now being published. 16

While there are data on informal savings use, certain limitations must be noted. In Findex, ISMs are narrowly defined. The question on the Findex survey only asked about setting aside money ‘using an informal savings club or a person outside the family’. An issue here is that there might be a specific translation of the word ‘savings club’ in the local language that does not cover the specific form of savings mechanism that the respondent is using. Alternatively, people might save in ways that they might not think of as saving. Making a loan to a friend is one example (as the data show, those kinds of informal loans are quite common). 17 Moreover, since it is survey based, data quality depends on the respondent. Respondents might evade questions, forget activities or not know about savings.

2.1.2 Informal savings methods: Additions or substitutes?

Many financially underserved households save both formally and informally. Informal savings arrangements offer products or provide advantages – such as convenience or community building – that are not available through saving at a financial institution alone. 18 Membership in several SGs can bring advantages for users. A focus note by BFA confirms that informal and facilitated SGs need not necessarily crowd each other out, as many individuals belong to several groups at a time. It mentions the example of a single mother in Western Kenya who belongs to a SG and two ROSCAs. While she uses the SG for short-term credit and to earn ‘interest’, her ROSCA memberships help to pay for larger lump sum needs such as her son’s university fees. Share-outs at different times may help to smooth consumption patterns. Participation in two or more SGs allows users to diversify sources of income and savings and fulfil various needs. This is consistent with scholars’ descriptions of SGs as part of a portfolio of formal and informal financial services.

What financial diaries have confirmed so far is the alleged level of eclecticism of income sources and informal savings mechanisms and the return they render among these sources. Incomes are pieced together from multiple sources. The median household in FSD Kenya’s financial diary study had 10 separate income sources registered throughout the Diaries year. 19

Participation in multiple SGs and other cooperatives is common in Kenya, where around one in five of all members belong to two or more SGs. These participants explain that they joined additional groups to have more opportunities to save or borrow, or to make friends. However, multiple membership also increases the risk of over-indebtedness. FSD Kenya found that approximately 10% of SG members have borrowed from more than one group at a time: apart from

16 See here for a selection http://www.microfinancegateway.org/library/highlight-financial-diaries
18 Global Findex Survey 2014.
19 Zollmann (2014)
the individual default risk, this enhances the systemic risk to the SG networks (FSD Kenya, 2015). A recent Financial Diaries study supported by FSD Kenya showed how members of groups use ROSCAs and ASCAs simultaneously and for different purposes. Both appear to be strongly valued (Zollman et al., Forthcoming). Use of multiple sources for savings might be valued for multiple sources of finance. Evidence from a DAI study on a group savings and loan association (GSL) found that GSL members value having access to multiple loans throughout the agricultural seasons and changing cash flow cycles. Ninety-three percent of the member sample borrowed from their GSL within the past two cycles, and the average borrower took 4.4 loans. These loans help members plug critical vulnerability gaps and capitalise on valuable business and purchasing opportunities that, in many cases, would be otherwise unavailable (Matthews et al., 2010).

2.2 The virtues of SGs

SGs are among the informal tools that financially underserved households use in different forms and to varying degrees in developing countries. Participation in SGs provides members with many benefits (Ashe and Neilan, 2015). Owned by their members, SGs are low-cost and accessible and they instil more savings discipline than saving by oneself at home; they mobilise local capital to meet local needs. As a savings-led financial tool, SGs are suitable for risk-averse consumers and offer an alternative to microcredit. In contrast to microcredit, they are profitable for the members, owned and organised by their members, and require a fraction of the staffing. Allen and Panetta (2010) found that SGs have drawn members from across a broader social and geographical spectrum than other types of service providers and typically exclude very few people. They provide extraordinary returns on member investments and have high retention and survival rates. Like microcredit, SGs provide members with a loan opportunity that can be accessed for income-generating activities, consumption purposes or emergencies. There are peer-reviewed studies as well as findings from project and programme evaluations that shed light on what SG members value about their membership. Members appreciate the opportunity to save and borrow at the same time, the easy and quick access to credit, as well as the lump sum provided by the annual share-out. Also valued are the regularity of saving and the commitment and motivation that comes from being part of a group. Other valued features include accessibility to multiple loans throughout the agricultural season, cycle-end distributions, and simple and instant SG loans without collateral (Matthews et al., 2010). Beyond the financial benefits, SG members also appreciate the sense of inclusion and community that comes from SG membership. Members talk about solidarity and stronger communities, about being together and giving each other moral support (DAI, 2010; Rippey and FSD Kenya, 2015; Odell and Rippey, 2011).

2.2.1 Behavioural change and impact on savings and credit levels

What are the behavioural changes resulting from joining a SG? The behavioural change that is most obvious is the use of passports and ledgers for record keeping and the use of a shared

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20 For a detailed juxtaposition of the virtues of microcredit versus savings groups, see Ashe (2015).
21 Generally, members can borrow up to 3–4 times their accumulated savings amount for typical loan durations of 1–3 months, at interest rates of 6–10% per month on the principal balance. Emergency loans are generally provided with zero interest and often even as grants. Samples from Kenya, Uganda, Tanzania, and Rwanda. Source: BFA (2012a).
22 Thanks to Rasulov (2016), these studies were already collected and summarised for the author.
23 See: DAI (2010); Rippey and FSD Kenya (2015); Anyango et al. (2007); Tanaja (n.d.); BARA and IPA (2013); Bermudez and Matuzeski (2010); and MicroSave (2009). Also confirmed in Matthews et al. (2010).
24 Note that a study in Kenya comparing CARE’s approach to that of CRS showed that the use of ledgers (compared to passbooks alone or passbooks used with ledgers) very strongly correlated with members being satisfied with their share-out method. However, here again, CRS groups are more likely to use ledgers only, so the satisfaction with the share-out may be due to other elements of the CRS approach. Source: FSD Kenya (2015).
cash box. For some members, the use of a virtual cash box through the SG (rather than a physical one) might be the first formal connection to a financial service they have ever made. Moreover, the regular meetings constitute a defining feature of SGs and a tangible behavioural change. Also, the addition of a shared social fund is an SG feature that saving by oneself does not provide. The social fund is a simple form of insurance to cover the costs of small emergencies (e.g. illness) free of interest, although it should be noted that not all SGs have social funds.  

Financial diaries studies could render the most precise details on behavioural change resulting from participating in a SG: such studies in Kenya have already provided insights on education spending (Collins et al., 2015), risk perception (Zollman, 2015) and how digitising payments affects users (Zollman and Cojocaru, 2015). Similar research projects have been or are being conducted in Bangladesh, India and South Africa by MicroSave, in Mexico by Bankable Frontier Associates (BFA) and the Multilateral Investment Fund (MIF)\(^\text{27}\), and in Zambia and Malawi by other organisations.\(^\text{28}\)

**Another observable change is the increase in savings and credit volumes per member. There is evidence from experimental studies in several countries that members increase their savings and credit levels as a result of participation in SGs.** IPA finds that if people were already saving and borrowing as much as they did before they joined a SG, then when they join one the level of savings and credit would be expected to remain the same overall (IPA, 2012). However, several studies found that SG members actually increased their total level of savings and credit (Annan et al., 2013; Bermudez and Matuszeski, 2010), often making SGs their favoured service provider. This also meant in a few cases that other informal financial services like ASCAs in Mali (BARA and IPA, 2013) and village-banking in Burkina Faso (Boyle, 2009) were substituted or crowded out. In 2013, the SEEP Network summarised a set of RCTs on SGs. Nearly all the studies reviewed in the report show an increase in savings among SG members, with balances up to 54\% larger than those of non-group members. The SEEP summary also finds that across most studies, SG members are more likely to obtain credit than non-group members. In a 2012 study that tested the effects of groups in Chile, the authors found that group participants had savings balances that were approximately US$15 higher during the course of a year than those of non-group savers — a 64\% increase.

### 2.2.2 Impact on savings use and spending

Studies on the use of funds describe the use of loans granted by existing SGs, the spending of the share-out and the use of the social fund. SG members mainly use loans for business investment in Zanzibar (Anyango et al., 2007), Zambia (Taneja, n.d.), Burkina Faso (Boyle, 2009) and Mali (BARA and IPA, 2013). Loans were also used for agricultural inputs, livestock, educational expenses and household consumption. Funds from the annual share-out of capital were variously used for bigger investment into business, agriculture, household construction and renovation, and education fees (DAI, 2010; Boyle 2009; Ksoll et al., 2013; Anyango et al., 2007). The bigger amount that is normally received with the share-out and the fact that the share-out is known about in advance make this money an ideal sum for bigger investments, which the household can plan for. Money from the social fund is normally given in

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\(^{25}\) SfC groups in Kambila, Mali, do not repay interest on emergency loans for illnesses. However, not all groups are so trusting. As a group in a different region pointed out, if they adopted such a policy, everyone would claim their loans were always for emergency consumption in order to avoid paying interest on loans used for income-generating activities.

\(^{26}\) There is an upcoming report by FSD Kenya on SG-related findings in the Kenya Financial Diaries. The Kenya Financial Diaries 2012–2013 transactions dataset contains the daily cash flows of 298 low-income households over approximately one year. The study was conducted across five areas in Kenya: Mombasa, Nairobi, Makueni, Vihiga and El Doret. Other auxiliary datasets with information on demographics, education, housing and well-being, among others, are available on their website for analysts.


\(^{28}\) MicroSave (2010a); MicroSave (2010b); FSD Zambia (2016); Microfinance Opportunities (2011); Stuart et al. (2011a; b; c; d).
times of emergencies as a grant in Malawi and as an interest-free loan in Ghana and Uganda (IPA, 2012). Most often this money is used for health and funeral expenses. However, in some cases it can also be used to buy food and pay school fees (IPA, 2012; Taneja, n.d.; DAI, 2010; BFA, 2013).

**How has the ratio between savings and expenditure changed at the level of the participant?** Summarising the findings of seven different RCTs, Gash and Odell (2013) observe an increase in savings (wherever measured), yet no measurable negative impact on household expenditures or consumption. It would appear that the increased saving did not occur at the expense of consumption spending or reductions in expenditures. They also found some evidence that SG availability or participation increases expenditures, but this evidence is not consistent across all seven studies.

**What has been the impact on productive/income-earning investments?** As mentioned above, there was evidence in four studies that SG members mainly use loans from SGs for business investment in Zanzibar (Anyango et al., 2007), Zambia (Taneja, undated), Burkina Faso (Boyle, 2009) and Mali (BARA and IPA, 2013). The collective evidence from the RCTs on the impact on business, however, is mixed. Gash and Odell (2013, p.8) explain:

> Although selected studies show evidence of increased business-related spending, profits, and the likelihood that a woman owns a business, these outcomes are not observed in all of the RCTs. Previous studies consistently showed increased business-related spending as well as increases in the number of businesses owned and existing businesses expanded. This slight disagreement between the RCTs and the pre-existing evidence can plausibly be explained by the limited time horizons of the RCTs, as many of the business outcomes are expected to take some time to appear. It is reasonable to expect that increases in business-related spending in the short-term study period may lead to increases in profits over a longer period, as supported by an observed increase in business profits in the CARE Uganda program. In addition, the OA/FFH study took place in Mali during a period of intense political instability, which may have shifted group participants’ priorities from business expansion to food security and other basic needs.

**What has changed in education spending? Was there an impact on education levels?** In their summary of seven RCTs Gash and Odell (2013) find mixed education impacts: positive effects include suggestive increases in primary enrolment in Ghana and mixed increases in education spending (or use of SG funds for education) in Ghana, Mali and Burundi. Examining one of the summarised RCTs in greater detail, it is noteworthy that SG loans may be used by parents to ‘buy more time’. Cameron and Ananga (2015) conducted two case studies in two villages in Ghana to explore the effect of SG membership on education. Because of SG loans, parents could keep children in school and avoid disruption in their schooling. These results further confirm previous research (not specific to SGs) that shed light on the correlation between access to credit and child labour. They show that child labour decreases (and school attendance correspondingly increases) when households have access to savings products. The causality between savings and school is twofold: on the one hand, the increased ability to afford school fees or other costs and on the other hand, school attendance is not interrupted in the event of shocks (droughts, for example) by an immediate need for children to support the household by working (Dehejia and Gatti, 2002; Beegle et al., 2003).

**Spending aside, what was the impact of SG participation on education levels?** In terms of impact, they found that more children were attending school and fewer were being sent home for lack of school fees. They also found a shift from public to private schools, which generally provide a better quality of education. The authors point out that these positive impacts were enabled by contextual conditions that allow parents to earn an income and repay such loans on time in order
for groups to be sustainable and for parents not to end up in extreme debt. On the other hand, the RCTs conducted in Uganda, Malawi and Ghana found that, while members said that they use loans and share-out to pay for education expenses, there was no significant difference in the amounts spent on education in the two groups. Overall, there was no increased investment in education by households in treated areas, even if there was a slight (non-significant) increase in primary enrolment for both boys and girls (IPA, 2012). The study in Burkina Faso found that SG membership had a positive impact on children’s education as more children from SG households could attend school (Boyle, 2009). The research with older groups in Mali reported that because women were now more able to pay for household goods and services, their children were also better educated (Bermudez and Matuszeski, 2010). A systematic review of studies concluded that SGs (and enhanced versions of SGs) were associated with increases in child well-being (Gash, 2015).

**Does health spending increase as a result of SG membership? Are the impacts noticeable?** As with education spending, the results are mixed. Members in some areas reported improved health and nutrition (Bermudez and Matuzeski, 2010; Boyle, 2009). However, the RCT conducted in Mali did not find any significant difference in the way in which households pay for health expenses or in the amount of health expenses (BARA and IPA, 2013). On the contrary, the RCTs in Ghana, Malawi and Uganda found that SG members are more likely to use loans to pay for health expenses, thus reducing the sale of assets (IPA, 2012). Participation in SGs can have direct and indirect impact on health expenses (Rasulov, 2016): this is similar to the findings on the impact on education expenses.

**Other research points to the relationship between SGs and health care expenditures as well as to the contribution of SGs to food security. This highlights SGs’ social protection function.** Presenting a framework to analyse combined health and financial interventions through microfinance programmes to SGs, Saha (2014) states that – if properly designed and ethically managed – such integrated programmes can provide more health for the money spent on health care. It has long been assumed that ROSCA not only offer a means of saving and resultant source of income but also function as a social protection system that can help manage the consequences of economic shocks. Raccanello and Anand (2009) use a probit model estimation to support the hypothesis that current participation in ROSCA is more likely when funds saved during previous membership in such associations were useful for financing extraordinary as well as unexpected expenses related to health needs.

**Experimental trials in Mali observe that the main positive impact of SGs was the increased ability of the treatment groups to deal with shocks.** A key aspect in coping with shocks was the significantly lower level of food insecurity in treatment villages compared to control villages. This finding was supported by the picture given by the high frequency data collected by the study. Indeed, while both treatment and control villages experienced a reduction in consumption during the lean season, treatment villages experienced a smaller reduction, thus showing that they are better able to handle difficult times of the year (BARA and IPA, 2013: 47–49). However, not all studies found positive findings. For instance, IPA (2012) found that in Malawi, Ghana and Uganda the SG services did not change the ways in which households deal with shocks (e.g. mainly by selling assets). This suggests that further study on the drivers of food security among SG members is needed.

**In terms of long-term impact on households’ livelihoods, experimental studies on SG membership’s impact have encountered limitations due to their inherent design.** In

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29 Cameron and Ananga (2015) also acknowledge that participation in SGs can impact on educational outcomes also in an indirect way. In cases where loans and annual pay-outs are mainly used for income-generating activities (e.g. agricultural inputs), SGs may directly improve household livelihoods and income, consequently making families more able to invest in education. In particular, the authors mention that a decrease in child work, hunger and malnutrition and an increased role for women in household decision-making can all positively contribute to improved investments and outcomes in education.
their synthesis of RCT studies, Gash and Oddel (2013) found that RCT studies have mainly been able to identify changes at the household level that take place during the first three life cycles of a SG. There is not yet strong evidence of impact for older groups (over three savings cycles). This is likely to be a consequence of the fact that RCTs have all focused on much younger groups, since after a maximum of three years the programme was always also spread to control areas.

2.2.3  Impact on savings forms and asset ownership

There has been less research on how SG participation affects the forms in which individuals save. It could be argued that asset ownership is a form of saving. Gash and Odell (2013) summarise RCTs on SGs and find that results on asset ownership are mixed, with a somewhat small increase in small animal ownership in the CARE Malawi programme and a relatively larger difference in livestock holdings in the Oxfam America/ Freedom from Hunger (OA/FFH) programme in Mali. In Burundi, households in treatment areas had significantly increased their asset ownership (Annan et al., 2013). In Malawi, they had also increased their household consumption and the size of their houses (Ksoll et al., 2013). In Burkina Faso, women had been able to invest more in small animals and agricultural inputs (Boyle, 2009). CARE’s evaluations in Ghana and Uganda found no significant impact of SG availability on asset ownership. The IRC mid-term evaluation found a significant impact on household asset ownership using a composite asset index: treatment households had the asset equivalent of one additional head of cattle compared to control households. Note that negative effects on asset ownership were not observed in any of these studies.

Comparing different facilitation models, the RCT by Catholic Relief Services (CRS) compared asset ownership in private sector provider (PSP) versus field agent (FA) households and mostly found no significant differences between the two groups. Where differences did emerge, they were small and favoured the FA households (Ferguson, 2012; Gash and Odell, 2013). The study also found no significant differences in income between PSP-supported and FA-supported households.

A key argument for financial linkage – the linkage of SGs to a FSP – is the shortcomings of SGs. Members are rarely able to save for longer than a year, preventing them from saving enough for larger purchases related to housing, farming equipment or other productive investments. Members often intend to use the end-of-cycle share-out amounts for lump sum purchases, such as business assets (including livestock), home improvements or construction, or educational fees. However, while the share-out does generate a lump sum that would be difficult for many members to accumulate at home, share-outs do not always suffice to cover the amount needed for such investments (BFA, 2013).

Whether savings accounts represent an addition to the portfolios of their members or whether they replace other forms of savings has been debated. Results are divided. Findings from the Savings for Change (SfC) study in Mali also showed that the programme – the purpose of which is the facilitation of SGs – did crowd out other types of SGs. Basically, traditional SGs were replaced by facilitated ones. Participation in ASCAs and ROSCAs and other SGs decreased where participation in the SfC groups increased. This means that some of the economic outcomes were derived from improvements in the organisation and terms of SGs rather than the introduction of a completely new concept. Moreover, there was small but statistically significant decrease in the amount of savings held in formal institutions. Note, however, that very few women in the study had formal savings accounts at all (Beaman et al., 2014). It must be underscored that the intervention in this case was the SfC programme, which constitutes an improved version of the pre-existing informal arrangements. The intervention in the case of this RCT is thus not membership in an SG per se but rather membership in an improved, facilitated SG.
2.2.4 Non-economic benefits of SGs

Beyond the financial benefits of the SG membership, studies other than RCTs indicate that SG members also value the sense of inclusion and community that comes from participating in SGs. Feigenberg, Field, and Pande (2013) found that increased frequency of meetings for group-based micro credit can increase social capital, lightening constraints that stem from asymmetric information. A sense of community, solidarity and moral support pervade SG membership (DAI, 2010; Rippey and FSD Kenya, 2015; Rippey, 2011). In a study of financial diaries by FSD Kenya, new friendships were mentioned as the main reason to join SGs – albeit by a mere 0.4% (FSD Kenya, 2015).

While also cited as a benefit in anecdotes, enhanced social capital was not captured at all by the RCTs. Arguably, this concept is difficult to capture in an RCT and is better explored through qualitative research. In several studies women reported feeling more in control of their finances and also being more able to contribute to household expenses, thus making them less dependent on men and giving them more decision-making power (BARA and IPA, 2013; Cameron and Ananga, 2015; Elliott, 2014; IPA, 2012). Participation in SGs also was an opportunity for women to learn new skills and knowledge on how to manage money. This often translated into increased confidence, self-esteem and a sense of pride (BARA and IPA, 2013; Bermudez and Matuszeski, 2010). Women gained new credibility in their communities (Bermudez and Matuszeski, 2010), a higher status in their household and social status (Taneja, undated; Boyle, 2009; Rasulov, 2016). Likewise, in the SfC study in Mali, the facilitation of SGs did not render any difference in treatment or control respondents, i.e. no change in social capital, as measured by engagement in the community and social networks, and no impact on female decision-making power (Beaman et al., 2014).

It seems quite likely that these social impacts do exist but were simply not captured by the RCTs. Gash and Odell (2013) suggest that the RCTs did not address social impacts adequately and that questions in future studies should be re-framed using more social/psychological terms rather than economic ones. This could be because SGs (in ScF) were entirely self-formed and thus may have built on previously existing social capital.

There are reports of training provided by facilitators being highly appreciated. Since facilitated SGs often receive financial literacy training free of charge, the benefit of the financial literacy gained in this training would be a benefit worth mentioning. Financial literacy programmes will be discussed further below. In several savings-building communities, facilitators have reported that training has imparted certain principles into members’ behaviour toward one another and that membership has led to the creation of new friendships and bonds among community members. This strengthened social cohesion helps to address social injustices, especially discrimination against women, and common conflicts in the community (Odera and Muruka, 2007).

The popularity of SGs and their distinctive features entails questions should be asked about what drives their success and whether such drivers can be replicated. The savings discipline that is instilled into members by the group could, for example, be provided by other means. Reminders or prompts have been shown to have the same effect on savings discipline and a 2012 study of savings behaviour in Chile lends insight into this mechanism. In the experiment’s first stage the authors observed higher savings rates among people who made savings commitments in a group compared to those who saved individually. In a second evaluation, the authors sent some savers weekly text messages providing them feedback about their savings’ performance while leaving others to continue saving with no prompts. After a three-month period, savers who received follow-up text messages had increased their account balances by $34 (CLP 18,500) on average, compared to a 50-cent (CLP 262) decrease in the control group’s savings. Participants without weekly reminders faced negative effects from their limited attention to saving, while those with text messages overcame it and stayed focused on their goals. This evidence shows
that regular prompts can boost savings both within and outside of the group model (Kast et al., 2012).\textsuperscript{30}

In a different study, Cadena and Schoar (2011) evaluated the effect of (a) simple text message reminders and (b) financial incentives on borrowers’ loan repayments. These methods had similarly positive effects, which suggests that the text message reminders may be a more cost-effective intervention. A savings monitoring study showed that a single community member, rather than an entire group, can exert sufficient peer pressure to increase savings. The strategy of pairing savers to monitors eliminates the need to coordinate full groups (Financial Access Initiative (FAI), 2014). Similarly, the FAI finds that commitment savings research indicates that the right balance between structure and flexibility does not require a group.\textsuperscript{31} An intervention in Mali by ScF included encouraging participants to set a savings goal, which could induce an increase in savings due to a labelling effect (Dupas and Robinson, 2013). Further, experiments in financial product design demonstrate different means to instil savings discipline.\textsuperscript{32}

It should be mentioned here that there are efforts underway to use SGs as platforms to deliver other services, either by the facilitating agency or other organisations taking advantage of a network of existing groups. Without the SG platform, these services would have to be delivered differently. Some non-financial institutions are adopting the SG model and integrating it into their existing work in health, agriculture or support of people living with HIV and AIDS. Gash and Odell (2013) investigated this question in their synthesis. There are many reasons to pursue these activities in combination with financial linkages. For example, in Pakistan community-based SGs support and facilitate access to maternal, natal and child health services, in particular those delivered by the community midwives.\textsuperscript{33} Financial services that SGs provide can strengthen almost any programme by facilitating the purchase of programme inputs (seeds, medicines, etc.). Similarly, the groups can be a venue for addressing the many challenges beyond finance that their members confront. Water collection, soil management and home improvements (e.g. improved stoves, alternative fuel briquettes and solar lighting) are just a few issues on the larger development agenda that could be within the reach of SGs, according to authors. However, adding other interventions to the SG agenda comes with risks, counsel researchers at the SEEP Network. The main one is overloading SGs with activities that are supply-driven by external entities, rather than demand-led by SG members (Allen and Panetta, 2010).

2.3 Potential for financial and digital linkages

It should be underlined that the utility of informal savings systems is limited. For SGs, linking to formal financial services is thus expected to have advantages. The informal savings system is fraught with many risks. At home, savings are subject to theft and destruction and relatives’ demands on the household (in particular, trivial spending). Moreover, cash stuffed under mattresses and in pots renders no returns. In SGs, the limited size and often the long waiting period for share-outs (and the returns) are shortcomings, as is the limited range of the financial services provided. In forming a business case to make financial linkage attractive to SGs and their members, BFA mentions as one of the limitations of SGs the inherent restriction of SG cycles: members are rarely able to save for longer than a year, preventing them from saving enough for larger purchases related to housing, farming equipment or other productive investments. The Linking for Change Charter (CARE International, Plan and Barclays, 2014) predicts substantial gains for SGs upon linking them to FSPs. Provided linkage principles are followed, linking SGs to

\textsuperscript{30} For more evidence on how reminders affect savings, see Karlan et al. (2010).

\textsuperscript{31} See Brune, L. et al. (2014); De Arcangelis et al. (2015); and Ashraf et al. (2006).

\textsuperscript{32} For a discussion, see www.cgap.org/blog/details-matter-product-design-better-savings-experience

\textsuperscript{33} http://bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/1471-2393-13-185
banks can be expected to result in enhanced savings and profit per member, an option to access bigger loans, and the entry of SG members into the financial system.

2.3.1 Perceptions of limits of ISMs

What do SG members see as the limitations and weaknesses of the groups in terms of meeting their financial needs? What do SG members see as the benefits and the disadvantages of using formal financial services in terms of managing money and the concomitant impact on livelihoods?

There are limited surveys on members’ perceptions of their SGs. Publications focusing on findings from financial diaries of further countries are expected to shine further light on the attitudes and perceptions of SG members. As a proxy, market studies by FSPs and NGOs can be used.

FSD Kenya’s Quality of Delivery Study renders the most useful results on members’ attitudes about SGs. Note that the study distinguished between two aspects of savings: the ‘ability to save’, that is, having a place where members can keep their money safely; and ‘encouragement to save’, sometimes called commitment savings, which refers to the fundamental agreement in most groups that members will save at least a minimum amount at every meeting, the amount being set by consensus at the beginning of the cycle. Fifty-three percent of respondents in the Kenyan study named one of the two aspects of saving as the most valued service, while 24% named ‘credit when I need it’ as the biggest benefit. Other answers were ‘encouragement to save’ (21.4%); ‘social support during hard times’ (15.9%); and ‘don’t have to beg or ask neighbours for money’ (6.5%). In addition, 0.4% said the biggest benefit was new friends. It is striking that half of respondents could not name anything about their SGs that they did not like. Moreover, 88% of group members reported that they were satisfied with the annual share-out, although only 63% said they knew their savings balance or knew how to find it. Just 5% of members said they had lost money in their SG. In terms of preferences expressed in open-ended questions, representative comments about what members of SGs liked included the following: proximity; costs of banks; commitment savings; procedural ease, flexibility; social aspect, moral support; support in new ideas and good practices; security; and no drainage of interest.

Repayment difficulties were perceived as the biggest drawbacks of SGs. The Quality of Delivery Study in Kenya collected comments about the drawbacks of being in an SG through open-ended questions at two points: during the 463 household interviews, the drawbacks to being in an SG were mentioned as follows (in descending order): 1. Members not paying back their loans on time. 2. Members of the group are forced to pay debts of any member who fails to pay the loan fully. 3. Paying back the money. 4. If you don’t pay on time your loan is rolled and it’s difficult to pay back. Importantly, all four relate to repayment difficulties. Mentioned less frequently were: ‘We don’t have a trainer’; ‘People don’t agree to pay fines’; ‘Refund of shares difficult when one wants to exit’; ‘Some members are too political’; ‘Some members don’t take loans to generate interest’; and ‘Sometimes members fail to attend meeting and exchange ideas’. Participants in the 100 focus group discussions with SGs gave somewhat different answers, with difficulty in saving leading the list: 1. Difficult to save at time. 2. Members come late or are absent. 3. Members don’t pay back. 4. Various issues with discipline or capacities of other members. Also mentioned were:

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34 The study notes that its results on the positive aspects of SGs generally agree with the benefits cited in Allen and Panetta (2010): ‘[The rural poor] need a safe way to save and borrow that is convenient, flexible, and available in their villages.’ (p. 9); ‘The poor often cannot bear the cost and time involved in travelling long distances to access services in alien surroundings.’ (p.11); ‘...the social cohesion, solidarity, and mutual aid that the Savings Groups engender’. (p.12); ‘...Savings Groups’ abilities to smooth consumption, protect and grow assets, increase social cohesion, and develop leadership and decision-making skills...’ (p. 27) ‘In Africa (home to the majority of Savings Groups), banks are usually distant...’ (p.37).
'We don’t have a trainer'; ‘Paying back my loans’; ‘Refund of shares is difficult when one wants to exit’; ‘When they visit your house you have to cook for them’ (FSD Kenya, 2015).

There are further shortcomings of SGs that were not mentioned by respondents but instead deduced by BFA: inability to build lump sums, cash shortage at the beginning of the cycle, and SGs’ limited ability to counter risks shared with other SG members. Limited savings cycles mean that SG members often cannot save enough for the important lump sum purchases mentioned above (housing, land, business assets and educational fees) in one cycle. Due to their cyclical nature, SGs have relatively little cash at the beginning of an SG cycle, when accumulation in the savings pot begins anew. Covariate shocks, such as droughts, pests and even war, affect all households within a certain radius. When such shocks occur, community-based risk protection mechanisms such as SGs are insufficient to protect households. Instead, external risk mitigation strategies (such as formal insurance) may be necessary and SGs are less effective at improving members’ access to funds (BFA, 2013).

The manual process of SGs is a hurdle, particularly as groups grow. The manual process is an obstacle to growth of SGs and their funds. This includes bottlenecks around accounting, logistical challenge. Treasurers can only handle so many members and funds. Increased, human error and the insecurity of a cash-based system. Increasing size makes it more difficult to maintain trust, transparency and an engaged sense of collective responsibility. Note that many of these scaling issues can be addressed by facilitating internal group transactions and communications via a mobile-based platform. For example, using mobile money to make contributions rather than doing so manually improves safety by reducing the amount of cash transacted at any single aggregation point and decreases the error rate by precisely tracking contribution details.35

2.3.2 Alternative delivery channels

Alternative delivery channels36 have dramatically affected people’s access to formal and informal financial services – in some countries more than in others (Barclays, Plan UK and CARE International, 2013). Barriers to financial inclusion are widely covered in the literature and include, among others, the distance of banks to the financially underserved. Banks, mobile operators and retailers have all tried to reach the ‘unbankable’ through these channels. In Kenya, the use of mobile phones has allowed for mobile payments; Safaricom’s successful M-Pesa product in Kenya catalysed experimentation among hitherto reluctant mobile operators. In Tanzania, CARE International has cooperated with Vodacom to provide a mobile wallet. In other projects, an FSP provided the point-of-sale infrastructure needed to register SGs and their members. In Latin America, the use of correspondence banks – such as kiosks, shops, and the like – allows for a drastic reduction of transaction costs. New delivery channels beyond branches – such as ATMs, banking agents and mobile phones – are as much marketing and acquisition as cost-reduction strategies for FSPs. For FSPs, this has changed the economics of serving low-income customers. They can leverage the agent infrastructure to expand without the capital expenditure cost, thereby increasing account volumes more rapidly. Agents – in turn – receive a fee revenue from the bank. If the agent is a physical outlet – such as a store or kiosk – financial services business forms part of an increased service offer and can increase walk-in business. For customers of financial services, proximity in the form of an agent store or mobile phone saves time and costs and is convenient. For example, Lemon Bank in Brazil has leveraged this model successfully. These efforts have had results on financial inclusion. Nearly 40% of branchless financial services customers in developing countries previously had no access to services at all. CGAP researchers have found that branchless financial services can scale five times faster than traditional MFI.

35 www.cgap.org/blog/savings-groups-fuel-digital-design-smallholders-rwanda
36 Note that as alternative channels or branchless banking, the author understands the traditional branch and loan officer model. At its core, branchless banking consists of payment technology (a cell phone or a point-of-service terminal) combined with a retail outlet which acts as agent of the FSP for account opening and cash-in/cash-out.
is 38% cheaper than traditional banks for the small value transactions typically undertaken by low-income customers. That said, the impact on financial inclusion has varied from country to country and has not always turned out as expected. For instance, FAI finds that mobile phone penetration does not explain much of the cross-country variation in rates of sending money via mobile phone, as illustrated in the graph below.

The emergence of alternative channels has been widely covered in expert and some academic literature. Instead of summarising it here, the following references should be helpful. As far as the impact on users is concerned, mobile money has been covered most extensively: there are numerous micro-empirical studies on the economic effects of mobile money. In addition, there are regularly updated databases that look at the use of mobile money: InterMedia publishes the findings of the Financial Inclusion Insights (FII) programme, the Financial Inclusion Tracker Study (FITS), and the Tanzania Mobile Money Tracker Study (TMMTS). FII produces original data and practical knowledge on demand-side trends in mobile money and other digital financial services mainly for individuals. The coverage includes Bangladesh, Ghana, India, Indonesia, Pakistan, Kenya, Nigeria, Tanzania, Rwanda and Uganda. These surveys are not panel studies.

FITS tracks awareness, use, drivers and barriers to use of mobile financial services for households. TMMTS tracks market trends, mobile money adoption, awareness and use, as well as the drivers and barriers to mobile money expansion. The datacentres at http://finclusion.org/datacenter/ and www.mmoneydata.org/ are likewise helpful. From the supply side, GSMA Mobile for Development impact publishes market statistics for mobile money (and other mobile innovations, such as mobile insurance services and mobile credit and savings services) including competitive structures. Their 2014 State of the Industry: Mobile Financial Services for the Unbanked is another important reference point.

Beyond mobile money, FAI, CGAP and others are among the initiatives covering the impact of alternative delivery channels on users of financial services. Is there a robust set of experimental results on the impact of branchless banking on financial inclusion? A review of J-Pal’s database reveals there are studies on the effect of reduced transaction costs. Jack and Suri (2014) explore the impact of reduced transaction costs on risk sharing by estimating the effect of mobile money on household consumption. They find evidence

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38 Data source: Global Findex database, 2012 (http://datatopics.worldbank.org/financialinclusion) and World Bank World Development Indicators Database. Graph and analysis by Kerry Brennan, Financial Access Initiative (www.financialaccess.org). Note: Subscription data are from 2010 and include both prepaid and post-paid subscriptions.
40 https://mobiledevelopmentintelligence.com/statistics
https://mobiledevelopmentintelligence.com/network_coverage
https://gsmaintelligence.com/
that access to the system increased people’s ability to reach out to family and friends in an emergency, thus significantly reducing the impact of negative shocks (such as severe illness, job loss, fire or harvest failure) that could have knocked them back further into poverty. Schaner (2014) studied the transaction costs associated with opening, maintaining, and withdrawing funds that may be a barrier to using formal savings accounts for unbanked individuals. Results show that providing ATM cards significantly increased account use. However, this was entirely driven by accounts owned by men and jointly owned bank accounts – treatment effects for women’s accounts are negative and not significantly different from zero. Results suggest that one important driver of this difference is intra-household concerns: both men and women with high levels of proxy bargaining power respond positively to the ATM treatment. There was no evidence that differences are driven by self-control or financial literacy. In studying the challenges faced by the unbanked in banking in rural Kenya, Robinson et al. (n.d.) find that while simply expanding access to banking services will benefit a minority, broader success may be unobtainable unless the quality of services is simultaneously improved.

Reduced transaction costs due to alternative delivery channels were also considered a driver in the ongoing work on cash transfer programmes: Gertler et al. (n.d.) evaluated whether lowering the cost of accessing savings accounts through local point-of-sale enabled agents and providing financial literacy training impacts the saving and consumption patterns of cash transfer beneficiaries in rural Peru. For the cash transfer programme JUNTOS, they found high prevalence of cashing out among beneficiaries when running an RCT to test the efficacy of the branchless banking model. Aldana et al. (2014) in their evaluation of the Opportunidades programme in Mexico explore how distance from the bank branch and other related costs affect the savings behaviour of recipients. A completed RCT by Galiani and Busso evaluated the expansion of network stores in the Dominican Republic that helped distribute the public cash transfer programme. The Government of the Dominican Republic was concerned that its cash transfer programme allowed participating stores to raise prices while offering lower-quality products. The researchers found that adding stores to the network resulted in lower prices without affecting product quality.

Research on mobile money promotion and SGs in Ghana found that very simple group promotion techniques increased the usage of mobile money services among individual members, speaking to their cost-effectiveness (Aker and Wilson, 2013).

There are experimental studies on different forms of banking agents. Ashraf et al. (2006) evaluated the impact on clients’ savings of a door-to-door deposit-collecting service in the Philippines, which regularly collected funds from clients’ homes to be deposited at a local bank. Results demonstrated that clients who lived farther from a bank were more likely to take up the service, and clients who took up the service significantly increased their savings.

Due to their small size and often remoteness, SGs are target clientele for alternative delivery channels, above all for mobile money. Freedom from Hunger used mobile phones for financial linkage of SGs in a pilot project in northern Burkina Faso through Airtel Money and shared the experience in a study. Involving the provision of a financial education module and supporting local implementing NGOs, the project served as a test of the digital financial linkage model. Among the challenges were the illiteracy of some group members, which made it difficult for them to use their Airtel Money accounts. Likewise, limited Airtel signal was an inconvenience but members were encouraged to travel to areas near a signal.

43 www.povertyactionlab.org/evaluation/challenges-banking-poor-rural-kenya
44 www.povertyactionlab.org/fr/node/9977
Some groups feared they would fall victims to fraud, that their PIN code would not work and they would lose access to their funds, or that the fees for making withdrawals would become burdensome. Agents were aware of women’s initial distrust in the system and their preference to keep their money in cash at home (Loupeeda, Ouédraogo and Gash, 2015). On the latter issue, the findings of the Gates Foundation workshop on why rural women do not use digital financial services are also instructive.46

2.3.3 Financial literacy

Financial literacy should be a pre-requisite to obtaining access to formal financial services, including savings accounts. Participation in SGs even as a mere member (rather than treasurer) requires a certain level of financial literacy that bodes well for future formal financial service use.

Many traditional (unfacilitated) groups were the product of self-replication and have continued the tradition of trust and the social set-up that is conducive to peer-to-peer lending. The leaders of established groups trained new ones at no additional cost. In a facilitation project in Uganda, it was observed that after four years each group trained by staff had trained two more groups in Uganda (Ashe, 2015). As part of a replication effort (for SGs) some NGOs conduct training and then rely on social networks to spread the benefit (Allen and Panetta, 2010).

This social set-up of SGs is also conducive to peer learning, as the agglomeration effect of SGs makes the provision of financial education training cost-effective. Groups are less likely than individuals to be duped by loan sharks and thieves. Moreover, members typically know and trust each other, which is helpful in a situation where formal (professionalised) financial advice is lacking. When asked about their primary sources of financial advice, 55% of adult Kenyan women, for example, named friends and family (FSD Kenya, 2015). CARE International (2013, p.5) found that financial literacy training is more easily (and cost-effectively) provided to groups, and concepts are better understood when weaker members have a regular setting in which to interact with stronger members whom they trust. The group mechanism is also attractive to lenders because of the peer pressure that members exert on one another to pay back loans, which is a principal driver of savings groups’ low levels of credit default.'

NGOs that assist SGs in financial linkage are likely to include financial education for the SG and its members. For example, part of CRS’s SMART Skills series for rural development is the 11-lesson financial education curriculum, which helps to provide trainers with the tools to teach groups about financial management and assists group members to improve their financial and money management skills. It includes four booklets that are appropriate for development facilitators, FAs and Savings and Internal Lending Community (SILC) private service providers (CRS, 2012). Preparing groups for linkage, CARE recommends that a structured training programme is delivered to SGs as part of their routine weekly meetings. It should tackle misperceptions about financial services and provide grounding in financial literacy. CARE’s own programme contains five modules (what is linkage and why linkage?; Understanding the linkage product; Formulating groups’ internal norms for participating in linkage; Managing VSLA records for linkage; and Understanding the impact of external linkage on members and VSLA) (CARE International, 2013).

Simple instructions have proven successful and impact is possible if the curriculum, delivery and context are all conducive. Having simple rules of thumb is particularly valuable. Working with Dominican MFIs, Drexler, Fischer and Schoar (2010) recommend separating business and personal accounts as one of several simple steps instead of detailed financial

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concepts. For details on the user experience, one can study the financial diaries of Ugandan savers (Uganda Financial, 2012).

**Digital financial linkage brings its own challenges – financial and digital literacy is advisable.** In a recent pilot project in Burkina Faso, the MNO Airtel Burkina (rather than the facilitating NGO) committed to developing and delivering a financial education module aimed at supporting SG members to measure readiness to access formal financial services (Loupeda, Ouédraogo and Gash, 2015).

Advocates of the financial linkage of SGs to formal services will argue that financial literacy and money management training decreases default risk by formalising a sequence of meetings after group formation. The financial education and linkage training materials should be designed to cover the attributes of financial products and to ensure groups have realistic expectations about what the bank will and will not offer (e.g. the availability of credit products). In addition, there are also linkage assessment tools that help to flag potential issues related to savings capacity, group quality and potential group conflicts (Barclays, CARE International and Plan UK, 2013).

**Do experimental studies confirm the impact of financial education as well as these recommendations?** Browsing the J-Pal database, one finds a number of experimental studies on the impact of financial education on the behaviour and knowledge levels of individuals rather than SGs. Nevertheless, the following should be helpful:

- When Can Financial Education Affect Savings Behavior? Evidence from a Randomized Experiment among Low Income Clients of Branchless Banking in India.
- Cole, Shapiro, and Shastry (2012) studied financial training for mineworkers in South Africa. They evaluated the impact of a financial literacy workshop on miners’ financial understanding, behaviour and use of financial services. Preliminary results suggest that miners offered training were more likely to make financial plans and reorient some spending choices.
- Carpena et al. (2011) studied the effect of financial literacy on personal financial decision-making in Gujarat, India, assessing the impact of financial literacy training on the demand for both formal and informal financial services among slum dwellers.
- Seshan and Yang (2014) explored financial education for Indian migrant workers in Qatar. They examined the impact of receiving an invitation to a savings-focused financial literacy workshop on the financial decisions of Indian migrant workers in Qatar and their wives in India. A one-time financial literacy workshop in Qatar increased migrant workers’ joint financial decision-making with their wives in India. Among migrant workers with originally low levels of savings, the workshop likewise increased total savings.
- Cole et al. (2014) evaluated whether a financial literacy programme improved financial knowledge and practices, and increased financial service use among low-income individuals in South Africa.
- Attanasio, Bird, and Lavado (n.d.) studied tablet-based financial education in Colombia, collaborating with Fundación Capital and the Government of Colombia to conduct a randomised evaluation of a financial education making use of tablet- and smartphone-based apps to study its impact on financial knowledge and behaviour. Preliminary results indicate that the tablet initiative had significant impacts on financial knowledge, attitudes toward formal financial services, adoption of financial practices, and financial outcomes.  
- Karlan and Zinman (2012) explored using radio and video as means for financial education in Peru, attempting to evaluate the impact of a technology-based financial literacy programme on

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47 [www.3ieimpact.org/media/filer_public/2014/09/19/evidence_from_a_randomized_experiment_among_low_income_clients_of_branchless_banking_in_india.pdf](http://www.3ieimpact.org/media/filer_public/2014/09/19/evidence_from_a_randomized_experiment_among_low_income_clients_of_branchless_banking_in_india.pdf)

microcredit clients’ financial behaviour. However, low implementation levels led to a discontinuation of the evaluation.

- Jamison, Karlan, and Zinman (2014) explored whether teaching savings practices to Ugandan youth and increasing their access to bank accounts may help them save. They found that total savings and income increased among youth offered financial education. Three years after the intervention ended, youth who had been offered both education and group accounts still had higher savings levels and income (both business and informal) than those in the comparison group. Business incomes was higher for those who had been offered financial education only, and informal income was higher for those who had been offered only group accounts.

- Burnsztyn et al. (2014) studied the impact of peer effects on financial decisions in Brazil. They tested the independent impact of two of these channels, social learning (when someone purchases an asset after a peer expresses a desire to purchase the same asset) and social utility (when someone feels he or she can gain more from an asset because his peer owns it), on financial decisions in Brazil. Both social learning and social utility had significant effects on decisions to invest in a newly designed real estate asset.

- Cole, Sampson, and Zia (2011) conducted a survey and the results from both India and Indonesia suggested that, while financial literacy is low, especially in India, it is an important predictor of household financial behaviour and well-being. Moreover, the demand for financial education seems to be quite high: 69 percent of those invited to participate in the financial education programme choose to attend the course.

### 2.3.4 (Mis)conceptions of formal financial services

**What about perceptions among the unbanked of banks and/or financial linkage?**

Anecdotal evidence from CARE International shows that SG members across different countries share common perceptions and misconceptions about the possibility of financial linkage. The most common obstacle to using financial institutions, cited by 39% of group members, was lack of funds. That groups considered the bank charges affordable was borne out by a study conducted among SGs in Kenya, which found only 9% of non-linked group members citing high fees as an obstacle to linkage (CARE International, 2013). Identified in Kenya as part of market research, the table below lists common misperceptions by SG members on the possibility of financial linkage. A similar list was found in most of the pilot countries, reports CARE International (M2i, 2011).

- **Groups are not registered with authorities so banks will not engage with them.**
- **Bank charges are very high on saving accounts.**
- **Groups do not have enough money to keep in a bank account.**
- **Banks may not have enough cash when groups want to withdraw their savings.**
- **Banks charge very high interest rates and other charges on loans.**
- **Banks are very harsh on repayments.**
- **Banks have high collateral requirements.**
- **Members may not have all the documents required.**
- **Groups will need to keep their entire savings in the bank to get a loan, so they will not be able to lend their own funds.**
- **Financial sector partners ask for joint liability, so even if only one member defaults the others have to pay, which is not acceptable to the group.**
- **Members do not have the ability to prepare business plans to access loans.**
- **The process is cumbersome.**

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49 Study conducted by M2I consulting in June 2012.
Financial diaries as well as surveys on the subject of bank accounts among SG members shed light on their needs and on their fears. Why do SGs want bank accounts? In a survey of 71 respondents, 97% mentioned safety of savings, 61% access to credit, and 30% reported the wish to build a financial history. Survey respondents included members whose group had an account with a financial institution. With 71 respondents, the sample was small (The MasterCard Foundation, 2014b). At the same time, BFA and CGAP learned through the study of financial diaries from Kenya of perceived losses associated with banks, which were caused by automatically debited fees of which the clients were unaware (BFA and CGAP, 2012).

While such an assertion is impossible to make conclusively, advocacy organisations like the authors of the Banking for Billions report state that groups want to link, citing particular enthusiasm from youth groups (Barclays and EIU, 2010). They argue that SGs – especially those that have been saving for two or more years – voice an increased need for financial products such as credit; this is especially true during the first three months of the SG savings cycle when savings in the group are particularly low and the demand for loans is high (Barclays, Plan UK and CARE International, 2013). This notion is confirmed by NGOs. CARE International (CIK) partnered with Equity Bank and Orange in Kenya for a project that was preceded by an assessment of need for financial linkage. It revealed that groups expressed a definite demand for linkages to formal financial institutions to store excess funds and to access larger loans (CARE International, 2013).

The MasterCard Foundation (2014) found high levels of satisfaction with linkage among group members, irrespective of whether linkage was facilitated externally or accessed by group members directly. It also stated that financial linkage through mobile money was increasingly popular while coverage challenges remained. It further found that cost of services was not perceived to be a major barrier. However, distance from bank branch or mobile money agent is a concern to group members.

The study further reports that NGO facilitation was crucial in attracting SGs to banks and MNOs. This highlights NGOs’ role as consumer advocates for SG members and a potential broker for FSPs. Plan, for example, is an NGO that helped Airtel with its group wallet products waza in Uganda. It was first introduced to groups supported by Plan, which has a strong presence in Kamuli and Tororo in Eastern Uganda. Airtel and Grameen then engaged Plan and its local implementing partner, Community Vision, to raise awareness of Airtel Weza amongst savings groups in these regions and train them how to use it. Airtel organised initial training sessions in Kamuli and Tororo for Community Vision’s community-based trainers (GSMA, 2015). Finally, it was observed that NGOs were hesitant to link to traditional (i.e. unfacilitated) groups in contrast to private sector companies. NGOs often enjoy the trust of the groups they facilitate: CARE International, for example, has – as a result – advocated linkage principles. NGOs often share SG members’ concerns about indebting SGs beyond repayment capacity and placing the group at risk. Facilitating agencies believe that they have a role in consumer protection and plan to provide guidance to groups concerning evident demand for credit and sensible levels of debt to equity.

Have studies on the impact of financial linkage of SGs confirmed these hypotheses?
While there are experimental studies on the impact of SG membership on households and the impact of microsavings on households, there is little peer-reviewed evidence on the impact of financial linkage of SGs on the groups and their members. The Linking for Change Charter states as motivation for its efforts: ‘Once linked to a bank the average savings per member increases by between 40 and 100% and the average profit per member doubles’. Individuals also graduate to the
formal financial system – about 13% of group members are willing and able to open individual accounts once they have been linked as a group (CARE International, Plan UK and Barclays, 2014).

In CARE International’s experience, the main effects observed as a result of linkage for SGs were: (i) a change in amount and frequency of savings within groups; (ii) improved internal loan repayment rates; (iii) better management practices within groups; (iv) group cohesion and self-esteem; and (v) higher profitability and returns on savings. A sample of linked groups saw significant increases in their savings, investment and rates of return on savings as compared with non-linked groups, while those with savings accounts started to save more each week because they were less concerned about the security of their money. Linked groups also reported a rise in self-esteem and confidence in dealing with formal institutions (CARE International, 2013).

2.4 The business case for financial linkage for FSPs

BFA has started to study what drives the business case for providers (FSPs and MNOs) to serve low-income individuals. Funded by the Gates Foundation, BFA summarised its extensive study in two focus notes: Outcompeting the Lockbox – Linking Savings Groups to the Formal Financial Sector and SG Linkages – The Business Case for Private Service Providers.51

BFA lists the benefits for banks and MNOs as: (1) the accumulation of considerable funds in the form of deposits, (2) liquidity for agent network management, (3) convenient points for and lowered cost of customer acquisition, (4) the generation of mobile money transaction fees, and (5) access to customer financial behaviour (BFA, 2013).

<table>
<thead>
<tr>
<th>Incentive</th>
<th>Provider that would benefit</th>
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<tr>
<td>1) Deposit mobilisation</td>
<td>If deposited, group savings would generate float income for banks. Because group deposits are expected to result in larger balances than those of the average individual benchmark deposit account offered to the low-income segment, this float income would generate greater profit, on average, per account. This improves the business case for basic bank accounts, a particular incentive in countries where the cost of capital is high.</td>
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<tr>
<td>2) Liquidity for agent networks management</td>
<td>For banks or MNOs managing agent channels, SGs provide a predictable source of cash, which could be used to coordinate liquidity among agents.</td>
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<tr>
<td>3) Acquisition of new clients</td>
<td>SGs provide banks and MNOs with a single point of acquisition of multiple new customers, as many SG members may not have direct relationships with banks or mobile money providers.</td>
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<tr>
<td>4) Steady transaction fees from SGs (through mobile money)</td>
<td>Regular transactions such as are characteristic of internal SG financial behaviour would benefit MNOs directly with steady transaction fee income, provided that fees are affordable enough for members to transact regularly.</td>
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<tr>
<td>5) Data on customer financial behaviour</td>
<td>Last but not least, digital linkages would allow banks, MNOs and SG members to benefit from data captured on savings and credit behaviour. By capturing internal financial behaviour electronically, providers could create profiles of expected customer savings and repayment capacity.</td>
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50 Lower delinquency rates, improved bookkeeping practices, better credit appraisal and enhanced internal controls are more evident in linked versus non-linked groups (CARE International, 2012).

51 It must be noted that several assumptions underlie the pro forma business model from which they included outputs and analysis in these focus notes. This pro forma business model is based on a pro forma costing model developed during previous projects with BMGF, the InFocus and Gateway Financial Innovations for Savings (GAFIS) projects. For details, see BFA (2012b) and BFA (2012c).
Along with benefits, BFA lists several conditions for its business case. BFA assess several linkage modes, including linkage of SG with/without linkage of members, digital linkages, the agent model, etc. BFA’s analysis suggests that providers will earn more from linkages to both groups and individuals than to groups alone, in any case. Moreover, using mobile money and wallets rather than branches affects commercial viability. In order to remain competitive with the traditional, village-based SG model in the rural areas in which SGs tend to be located, mobile money-based linkages would further have to provide fairly extensive mobile money cash-in and cash-out points (BFA, 2012b: 11).

BFA concludes that the digital linkage of the SG as well as of its individual members is the linkage model most likely to result in an incentive structure that is attractive to SGs and their members, as well as to MNOs and FSPs. The business case that the focus note makes is that a digital linkage of SGs aimed at eventually linking individuals as well as the group would be profitable for banks and would allow them to tailor products to individuals’ needs based on the information they collect digitally. For the members of the SG, the benefit of linkage to a FSP would consist in more options in terms of the financial products available to them. However, for linkage to be beneficial to SG members, digital linkage would have to be combined with a reduction of fees for mobile money services.

BFA’s analysis is based on assumptions. In order to verify these evidence on market segment size, customer acquisition cost and retention, use of mobile data and village agent models as a marketing strategy.

2.5 Market research

There is little research on the market segmentation of ISMS/members and how different segments respond to financial opportunities. In the existing literature, one finds market research on the demand-side for a few selected countries. There is also publicly available market research by MNOs on ISMs. CGAP and McKinsey undertook market research for Bottom of the Pyramid customers of financial services in Mexico, albeit not exclusively focusing on ISMs. Previous efforts to assess the market size of ISMs were undertaken by NGOs such as CARE International and advocacy organisations such as FSD Kenya for selected countries. FSPs providing group products have also undertaken market research prior to market entry but most of this is not available in the public domain as it remains confidential.

Surveys or consumer studies on what members value about ISMs exist; however, these are not broken down by ISM type and facilitation modes. There have been studies, even experimental studies, on other indicators of performance by ISMs – outreach, cost-effectiveness, group size, etc. – and how they are influenced by facilitation mode (village agent versus PSP approach, self-replication, etc.). An RCT study in Kenya, Tanzania and Uganda comparing two facilitation methods (PSPs and FAs) found that ISM members may be influenced in their inclination toward business investment and use of credit and savings for investment by the delivery model. Some case studies and evaluations of linkages have also explored the link between

52 "In order to fully overcome these drawbacks, it is crucial that linkages are designed to link not only the SG group, but the SG individual members themselves. Providing a link between the formal provider and the individual member then opens the door to a number of further financial options – both borrowing and savings – to suit the needs and financial patterns of the individual members. In BFA’s analysis of the Promoters’ data of their groups, it was clear that group members were not homogenous – some borrowed quite a bit, while others borrowed very little. Linkages to formal institutions create a digital pathway through which SG members conduct not only group-level transactions but also individual transactions. Group linkages could facilitate service delivery to individual members by allowing financial service providers to tap into a valuable resource – internal payment “histories” of individual members, which they could use to tailor products and outreach to particular SG members.” (BFA, 2012b: 11).

53 Drastically reducing or eliminating fees between individual accounts to the group account and vice versa would make a sizable dent in the fees incurred by members.
maturity, readiness and financial literacy. In this regard, CGAP’s emphasis and research on customer-centricity is worth reviewing.\textsuperscript{54}

2.5.1 Customer acquisition cost

The cost of acquiring an SG (and its members) as customers is a vital consideration in market entry strategies, but remains understudied. BFA’s research has rendered a pro forma business case based on research with FSPs, MNOs and savings group data from East Africa, it has focused on net monthly contributions by linked SGs and their members. However, BFA has neglected the acquisition cost involved in opening an account for SGs and individual members. There is very little data publicly available as even mobile money acquisition costs are unclear for the SG segment.\textsuperscript{55}

\textbf{Acquisition costs are considerable and include the cost of marketing and promotion, administrative expenses for client onboarding, possible financial training and due diligence expenses for Know Your Customer (KYC requirements).} A large part of the acquisition cost relates to marketing and financial education. In fact, the agglomeration effect of SGs (i.e. the scale effect of applying a less than proportional marketing and financial education effort on an SG account rather than on a similarly sized number of individual accounts) is one of the reasons SG financial linkage represents a favourable deposit mobilisation strategy for FSPs. Agglomeration benefits notwithstanding, SGs may require more time from staff due to inexperience with formal financial services and low levels of literacy (Barclays, Plan UK and CARE International, 2015). For this reason, existing linkage models have involved an NGO or other facilitator.\textsuperscript{56}

\textbf{Fidelity Bank and CARE’s experience in Ghana may provide an indication of the efforts acquisition entails for a financial provider.} Company presentations note that the linkage process took approximately a week each time to open roughly 500 accounts with five ‘smart friends’ (Fidelity staff) and approximately five agents. Quarterly schedules prepared by CARE, implementing partner organisations and Fidelity outlined the roll-out of the marketing campaign. CARE and implementing partner organisations prepared groups and gathered them in clusters. Fidelity smart friends travelled with CARE staff to locations to open accounts and set up agents. For the future, it is planned that the implementing partner organisations’ staff are trained as smart friends and equipped with phones to open accounts. As of March 2015, 10 implementing partner organisation community volunteers were already trained and equipped. It was noted that the relatively high cost of point-of-sale infrastructure for a village of a mere 100 people added to the cost (CARE International, 2013).

GSMA (2015) published a case study on another example, the Airtel Weza launch in 2014 and implementation in Uganda, that sheds some insights. Airtel Uganda partnered with Grameen Foundation, whose consumer insights research showed that members of SGs sought increased security, convenience, transparency, and access to credit. The group wallet presented an opportunity to safely store group funds as mobile money including mobile mini bank statements on transactions. Moreover, planned for the future were Weza wallets linked with bank accounts at participating financial institutions, which would give them access to interest-bearing savings and credit products. Credit is expected to be tied to a group’s saving history, and loans will be disbursed and repaid from the group wallet. There is so far little evidence of Airtel Weza’s commercial impact in these early stages due to the low absolute number of savings groups with registered Airtel Weza mobile wallets and the low percentage of active usage amongst those groups. Grameen’s early work on the business case for Weza forecasted a profitable product for Airtel that would generate direct

\textsuperscript{54} See www.cgap.org/topics/customer-research
\textsuperscript{55} Email by Steve Peachey.
\textsuperscript{56} NGOs that facilitate savings groups include amongst others Acre International, Plan UK, and Freedom from Hunger.
mobile money fees from withdrawals, fees earned from transferring funds from the wallet to the bank (once the bank option is activated), and indirect ARPU uptake as Weza customers increase use of their personal Airtel SIMs for voice, SMS, or Airtel Money (GSMA, 2015).

**When linking SGs, one cost component that FSPs will have to consider taking on as part of marketing costs is the cost for clients to go digital.** It is important to note that analysis conducted by BFA suggests that despite the potential benefits of linkages to SGs and members, digital linkages also come with high transaction fees. BFA finds that FSPs and/or MNOs wishing to acquire SGs and members might have to take on the initial expenditure for clients going digital in order to sustain a business model that brings substantial benefits (BFA, 2012a, p.16). In the case of Airtel Waza in Uganda, researchers found that men were more likely to have a mobile phone (required for a group wallet) than women who typically earned less (GSMA, 2015). This is supported by Barclays, Plan UK and CARE International’s (2015) study, which found that linking to SGs may require tailored savings products that have reduced or no fees; many groups also expect interest to offset the cost of travelling to the bank and to ensure their savings are growing.

**In order to assess the appeal of SGs and in particular the agglomeration benefit of signing on an SG along with its members, FSPs need to know how the acquisition costs occurred by financial intermediaries for savings groups compared to individual linkage.** From the work on InFocus in 2010/11 with four commercial banks, BFA found that the cost of opening an account ranged from $6.60 per account to $7.78 per account. These costs account mainly for marketing and promotional expenses, while other costs would include the time for personnel to onboard clients, conducting due diligence related to KYC requirements, printing cards, and the like (BFA, 2012b). Using SGs as an aggregator would thus be expected to reduce FSPs’ overall cost of acquiring new clients. Then, there are also estimates of the operating costs of small-balance savings accounts (not SG specific) by Deshpande and Glisovic-Mezieres (2007) in a study of five selected FSPs. However, apart from these, there is no other data on the overall cost of obtaining a SG (and its members) as clients. Moreover, there is no publicly available study or data on whether there is a learning curve or scale effect that could lead to a cost reduction for FSPs seeking to acquire savings group accounts.

**There are some anecdotal data on account opening cost from selected projects.** In Kenya, Equity, Orange and CARE International’s cooperation resulted in the Pamoja account:

*The average cost of opening a non-Pamoja account in Kenya is estimated at around $13 ($2 for printing and photocopies of documents plus $11 in transport costs and meals for three officials to journey to the main branch) while, for those who opened a Pamoja account at the community level (most clients), the cost was just below $2 (printing and photocopying costs). Additionally the costs associated with product registration and usage are minimal, especially when compared to other mobile money products in Kenya.*

**Similarly, MNOs’ competitiveness is driven by low-cost acquisition of new clients and high levels of transactions.** A FinAccess survey in Kenya showed that the majority of SG members are not mobile money users, suggesting that there is vast potential here. Given low acquisition costs, SGs’ agglomeration could represent a great opportunity for customer acquisition for MNOs. At present, high fees on MNO accounts are a hurdle to SGs and their members. The BFA business case suggests MNOs that joined FSPs in a digital linkage model reduced said fees and made up for lost revenues by leveraging mobile data to better understand customers and their...
transactions and tailor products accordingly. CGAP (2012) undertook similar efforts with the objective of developing a guide for mobile providers and supporters (e.g. large foundations) on the correct metrics and data to track in order to develop a deeper customer-centric view. This publication includes the acquisition cost per active customer for MNOs.

**To conclude, there is little information about the cost of acquiring clients via SGs. There are several strategies to gather data on the overall cost of obtaining a savings group (and their members).** An obvious strategy would be to survey successful linkage models (Fidelity and CARE International in Ghana, and Equity Bank, Orange and CIK (CARE International, 2013), etc.). A starting point for the selection of examples would be the 2016 State of Linkage Report, which lists financial products for groups worldwide. Another way would be to survey NGOs on their expenses or – where applicable – on their facilitators and add to this the cost of financial onboarding faced by the FSP. CARE’s 2013 publication *New Models to Financial Linkage* could also help in terms of project selection. To cut the distance between VSLAs and financial access points, CARE International introduced business facilitators, who are agents working for local partners and helping to facilitate the linkage, while not performing financial transactions. These agents have been paid by local implementing organisations, but increasingly FSPs have started to compensate them (CARE International, 2012). Inquiring into their operational costs would be a start. An example of an SG linkage project in Burkina Faso reveals the cost NGOs encounter in financial linkage:

*An estimate of the costs involved by each partner to achieve their respective performance shows that as of September 2014, it costs SEMUS about $161 to link one group to Airtel Money and prepare them to open their Ecobank account, $288 for ODE and $200 for ANTBA. It is expected to see these costs brought down dramatically given the rapid growth anticipated by the NGOs in their financial linkage program over the coming months.*

In studying account acquisition cost, the challenge will consist in comparing different SG linkage models: facilitated versus traditional (non-facilitated); different agent models; facilitation or level of financial training provided by NGOs, etc. Some SGs rely on volunteers to fill administrative, management and enforcement functions, while others pay for these functions. In models where the community becomes the service provider, administrative functions are not reimbursed and marketing and education efforts are not ‘costed’ (Allen and Panetta, 2010). Different SG linkage models will be discussed further in this review. In a partnership to digitally link SG and their members, either the MNO or the FSP would conduct the marketing drive – depending on which company’s costs of acquisition are lower or decreasing more rapidly. Partnering with mobile provider Orange and NGO CARE International, Equity Bank launched Iko Pesa, a full-service bank account (accessible by mobile phone) in Kenya in 2010. When a customer signs up for Iko Pesa, he or she automatically receives an Equity Bank account and a linked Orange mobile money account and can perform transactions with any Equity or Orange agent. An Iko Pesa customer pays only one unified fee per transaction (KES 52 ($0.61)) rather than paying separately for MNO and bank charges, as with other mobile banking services. Equity saw the potential to recruit new, previously unbanked clients at a lower cost because the new product would likely fit with current bank offerings and because CARE and its partners carried the initial outreach and organising costs. A grant from the Bill and Melinda Gates Foundation helped fund CARE’s operational costs in terms of preparing groups, training community based trainers, and the ongoing monitoring of group linkage activities. Equity Bank and Orange received no other subsidies and covered their own development costs (CARE International, 2013).

60 Office de Développement des Eglises Evangéliques (ODE), Association Solidarité et Entraide Mutuelle au Sahel (SEMUS) and L’Association Nationale pour la Traduction de la Bible et l’Alphabétisation (ANTBA) were the three implementing NGOs (Loupeda et al., 2015).
Studies on the profitability of low-income bank accounts are helpful. These include Armijo et al.’s (2013) work on correspondence banks in Latin America and the Caribbean and BFA’s In Focus Note #2, which includes an analysis of the business case for banks including account-level profitability and finds that the cost drivers are Transaction Frequency and Channel Usage for the four surveyed banks. BFA’s In Focus Note #1 is also useful for understanding low-income consumer needs. BFA’s GAFIS Focus Note #3 of 2012 explains how the business case for savings rests on net interest income, cost of opening accounts, monthly account maintenance costs, and transaction activity contribution (the net of the revenue from fee-generating transactions minus transaction costs, both direct and indirect).

**Beside acquisition costs, there are other considerable hurdles affecting the linkage of SGs to financial providers. Overcoming them is key to customer acquisition.** A study on linking savings groups in Ghana, Kenya, Tanzania, Uganda and Zambia by Barclays, Plan UK and CARE International (2015) researched six key challenges affecting the linkage of SGs to formal financial providers. These were: (i) distance to branches; (ii) the account opening process; (iii) demand for credit; (iv) the role of branch staff; (v) account access and usage; and (vi) the quality and design of linkage training. Their findings demonstrated that as customers SGs have unique characteristics and needs around which financial products should be tailored, and that training and support were central elements in the success of linkage (Barclays, Plan UK and CARE International, 2015). In Banking on Change (2013), they further find KYC requirements to be a hurdle. Groups, particularly those with low levels of literacy, have found it challenging to comply with KYC requirements such as proof of income or the need for a signature. Requirements can also vary across banks and change from time to time, causing delays or preventing account opening (Barclays, Plan UK and CARE International, 2013). CARE adds to this list of challenges the following for SGs: risk of cash in transit (groups face a risk of theft while transporting the funds from and to the bank); limited knowledge on the part of bank or microfinance staff about SGs and the linkage process; internal changes in systems and processes within the bank; and inadequate communication between the headquarters of the financial institution and its branches.

**SGs have special needs and require tailored products.** To achieve sustainable linkage, FSPs’ sales teams must understand their market, perform regular account analysis, and support the development of tailored products and services that meet group needs. CARE has issued principles for linkage, covering issues such as minimum requirements for group eligibility, the importance of financial literacy training, and avoiding using group savings as collateral. Drugov and Macchiavelloy (2008) arrive at an optimal lending contract (involving microlending schemes, such as mandatory saving requirements, progressive lending and group funds, but not joint liability). Rippey (2012) sets out principles for linkage.

**Some companies have been successfully pursuing human-centred design.** Key insights drove the design of new digital financial services and products in Rwanda. Given the demand for...
savings products, the challenge is to address this need with adequate products to suit SG requirements. Increased product flexibility is conducive. Further product attributes for savings can be developed around several parameters – the frequency of instalments, the amount of each instalment, the timing of instalments, provision to withdraw savings, formalities for accessing a savings product, and insurance and loan tie-ups with savings. Kapoor (2007) finds that any group product should be based on the existing system of SGs.

**Despite these hurdles, the aforementioned agglomeration of SGs makes marketing campaigns by promoters particularly effective.** For example, it took Vision Finance Company, the microfinance arm of World Vision, 11 years to build its portfolio of 17,000 clients in Rwanda, but after a mere six months of linking to VSLAs its customer base had grown by 6,000 people. Saving for Change in Mali, a joint venture of Oxfam America, Freedom from Hunger and the Stromme Foundation, reached 450,000 women organised into 19,000 groups with 209 trainers – one paid staffer for each 2,000 group members.66

**There are factors that favour SG members in terms of their likelihood of being linked to a financial provider:**

- **Religious and cultural factors in certain countries may make customer acquisition via SG linkage easier compared to customer acquisition via other products.** El-Gamal et al. (2011) observed the unbanked’s propensity to reject microfinance, when available, on religious grounds in many Muslim countries and proposed an alternative model built on the familiar ROSCA model. They then tested its performance against sequential Grameen-style microcredit provision in a ‘laboratory experiment in the field’ conducted in poor Egyptian villages. Such a model of bank-insured ROSCAs is shown to solve coordination failures that otherwise could prevent the spontaneous creation of informal ROSCAs in practice. Empirically, their guaranteed ROSCA model generated significantly higher take-up and repayment rates than the Grameen model, suggesting that this model can be a useful alternative for Islamic countries where many of the unbanked have rejected conventional modes of microfinance. Edwards (2010) provides some further evidence from an SFC study from the Kologo village in Mali, where two groups lost the support of their husbands and chief, who disapproved of charging interest for religious reasons. NGOs disagreed with this violating Sharia law, given that funds were owned by and interest accrued to group members themselves.

- **Peer effects are stronger in youth SGs:** Ramírez and Fleischer-Proaño (2013) claim that because young people are at stages in their lives when they are particularly susceptible to peer influence, SGs can positively impact young people’s financial behaviour through the group structure, integrated financial education and the dynamics of social pressure and social capital.

The demonstrated agglomeration benefit suggests that financial linkage of SGs and their members is an effective customer acquisition strategy, but how about the use of mobile banking products? A FinAccess (2013) survey in Kenya showed that the majority of SG members are not mobile money users – possibly because of high fees. There is a considerable body of literature on mobile money adoption. While popular and certainly a customer acquisition strategy, a stand-alone mobile money wallet is limited in its offer. Based on its experience in Tanzania, CARE arrived at this conclusion after realising that M-Pesa agents provided limited liquidity for the relatively large withdrawals that SGs wanted (as compared with the typical withdrawal size of an individual) and that many SGs and their members demand access to a wider range of financial products (CARE, 2013).67

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66 To reach the same number a typical MFI would require a permanent staff of 1,500, one paid staff member for each 300 users. Only a handful of trainers are monitoring Saving for Change groups in Mali today, with few signs that the groups are faltering (Ashe, 2015).

67 CARE has both types of partnership – one with Vodacom Tanzania, a MNO providing savings groups with access to a basic mobile wallet and payment service, but not offering savings or loans products; and one with Vodacom and Mwanga Community Bank providing savings groups access to banking products via their mobile phones.
2.5.2 Customer retention

It has not yet been established whether financial linkage of SGs performs better in terms of customer retention compared to other products. Is there a higher likelihood of keeping customers via linking SGs than via offering mobile money products? No data were found directly comparing retention, attendance or uptake rates in SG schemes versus mobile money. It is known that SGs as such are said to be highly sustainable. For example, evidence from adult SGs in Mali indicates that 95% of groups over a six-year period continued to meet, save and borrow (Cojocaru and Matuszeski, 2011). Typically, NGOs that facilitate financial linkage of SGs focus on the survival rate of the SG rather than the SG members maintaining their banking relationship. There are data available on the survival rates of SGs for various projects and target survival rates of 90% are common. Retention of customers and their accounts by FSPs after financial linkage of their SG is likely measured, but the data are not easily available.

There are studies on the linkage experience and satisfaction rates with financial linkage:

- The MasterCard Foundation (2014) finds high levels of satisfaction with linkage among group members in Sub-Saharan Africa – irrespective of whether these were facilitated or not.
- Unsustainable financial linkage can lead SG members to drop out of groups. In Niger, MFIs provided a large number of CARE’s SGs with credit without direct CARE facilitation. In all the SGs that were linked to MFIs, studied by CARE Niger, membership declined. The studies found that the worse the experience, the greater the drop-out rate. Groups that were not linked retained their membership or increased it (Rippey, 2008). Rippey (2012) finds the reason for the failure to be overleverage. In Rwanda, the results were mixed, with SGs making positive use of external credit for group-managed projects. The institutional arrangements were, however, unsustainable (Maes, 2007).

Similarly, there is evidence on what drives survival and drop-out rates for SGs:

- Drop-out may be caused by a better serving, alternative SG. SGs are demonstrated to be fairly fluid and evolve over time, whereby members from one group join a new group when they move or when a new group opens up closer to their home (Fleischer-Proaño et al., 2011).
- In a study on self-help groups (SHGs) in India for MicroSave, Ballem et al. (2012, p.16) found that the reasons for drop-out were migration, default by one or more members, group conflicts, lack of bookkeeping, and inconvenience:

> In 53% of the sessions, respondents indicated that migration is one of the main reasons for dropping out of SHGs. People in rural areas migrate to nearby or distant towns or cities in search of livelihood. This phenomenon occurs more frequently during periods of prolonged drought. Women also drop out of the SHGs after marriage and migrate to their husband’s village. Default: Respondents (47%) said that they dropped out of SHGs because one or more members of the group defaulted on the loans taken from SHGs. Since SHG members are jointly liable for loans granted to them, if one member of the group defaults, the other members drop out from the SHGs to evade liability of the defaulting member. Group conflicts: Conflicts within members of the group came out in 29% of the sessions as a reason for people leaving SHGs. Conflicts were due to partiality in disbursement of loans to select group members; improper book keeping; partiality in disbursement of government benefits etc. No bookkeeping: In 29% of the sessions, respondents said that they dropped out of the SHGs because financial records of the group were not maintained properly. Most

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68 Misati (2008) finds that intra-group ties stronger than the ties outside the group ensure continuity and survival of these organisations and that member commitment toward these groups is conditioned by the institutions of the society in which they live.
of the respondents (71%) are illiterate and not capable of maintaining a record of financial transactions. To overcome this, SHG federations appoint book keepers to maintain the books of SHGs. But in many cases book keepers do not maintain the books properly. Respondents said that because of improper maintenance of books, members lose track of their hard earned earnings and prefer to not save with or take loans from SHGs. Inconvenient: In close to 29% of the sessions, respondents said that they dropped out of the SHGs because they found it very inconvenient to attend group meetings, to make repeated visits to the bank and to visit federation offices. Other reasons that respondents cited for dropping out from SHGs include lack of capacity to repay (24%) due to old age, prolonged illness, lack of employment or death of breadwinner in the family; death of a member of the SHG; and SHG leaders or federation staff cheating (12%) the members.’

These data – gathered in India from women participating in SHGs – are relevant to African SGs as Indian SHGs are linked to financial intermediaries.

- **Group attrition is also said to be influenced by the group formation model.** For more details, see the next chapter on different village agent models.
- Internal power dynamics, kinship and the position of group leaders within their community are often at the origin of fund mismanagement and fraud, which can lead to group’s failure (Malkamaki, 2015).

Other publications of interest for customer acquisition and retention experiences by MNOs and FSPs include: CARE International (2011a); CARE International (2011b); Rippey (2011); and Rippey (n.d.).

### 2.5.3 Use of mobile data for credit scoring

In order to assess the credit score of potential customers, internal records from SGs could be useful. Unfortunately, records are often kept in writing and thus cannot be shared easily. Where financial linkage of an SG is combined with digital linkage, mobile phone data could be used to assess credit risk.

**Usage of mobile data by FSPs can foster financial inclusion and drive customer acquisition.** Yes Bank in India gained millions of new potential customers when it partnered with a fintech start-up MatchMove to offer people without a credit card, credit history or even a bank account a way to store and spend money.\(^69\) Likewise, the commercial success of Safaricom’s M-Shwari points to the value to be had from leveraging this type of individual, high frequency data to extend individual loans.\(^70\) MasterCard Advisors found that an estimated 1.6 billion of the 2.5 billion ‘financially excluded’ have mobile phones, most of them prepaid (McEvoy, 2014). It is difficult for low-income, rural SG members to build up financial histories by themselves with formal financial institutions in order to access a broad array of products, including credit.\(^71\) Making use of their mobile user data could allow FSPs to tailor products around their consumer and risk profiles. Risk models based on prepaid mobile data may provide the greatest benefit to developing markets with high unbanked populations and little-to-no credit bureau presence (McEvoy, 2014).

**There is research on the use of mobile data for credit scoring.** The logic behind usage of mobile data for credit scoring is that there are indicators of behaviour that are plausibly related to loan repayment. For instance, a responsible borrower may keep their phone topped up to a minimum threshold so they have credit in case of emergency, whereas one prone to default may allow it to run out and depend on others to call them. There are data analytics firms specialising on

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\(^{70}\) [www.impatientoptimists.org/Posts/2014/06/Savings-group-linkages-The-float-that-raises-all-ships#.Vr2Y1I3A0kk](www.impatientoptimists.org/Posts/2014/06/Savings-group-linkages-The-float-that-raises-all-ships#.Vr2Y1I3A0kk)

\(^{71}\) [www.cgap.org/blog/can-digital-linkages-revitalize-tried-and-true-savings-model](www.cgap.org/blog/can-digital-linkages-revitalize-tried-and-true-savings-model)

this proposition. Cignifi, First Access, Entrepreneurial Finance Lab and MasterCard Advisors have developed models showing that prepaid mobile history and phone usage are prognostic of a user’s capacity and willingness to repay loans. MasterCard Advisors find that just a few months of mobile data for a user can provide a sufficient sample to predict their risk of default (McEvoy, 2014). Combining bank data from loans that have been completed with borrowers’ mobile phone records, Björkegrena and Grissen (2015) demonstrate a method to predict default among borrowers without formal financial histories, using behavioural patterns revealed by mobile phone usage. They suggest that the method could be implemented in three ways. First, it can be used to extend telecom-specific credit, within the telecoms companies that already possess the necessary data. Second, it can be used to extend general forms of credit, by turning telecom data into a credit score that can be used by a bank, either through mobile banking platforms or an independent credit bureau. Third, it can be used to extend general forms of credit, by obtaining usage data independently. For example, lending could be provided through a smartphone app that asks for permission to view call history.

**There are data on the virtues of combining mobile money solutions and other financial services.** In forming the business case for the digital linkage of SGs, BFA in Focus Note 1 argue that, over time, data captured digitally could expand formal borrowing options for individuals by allowing banks to tailor products around previously unknown customers’ savings, use and risk profiles. In an SG project in Rwanda, a mobile wallet feature associated with a group account enabled the tracking of individual credit histories and payment behaviour for both group and individual members. This could enable banks to provide more favourable credit terms to disciplined savers and thereby reduce their risk exposure, creating opportunities for greater access to credit over time.72

**While there is much research on the use of mobile data for credit scoring done by private data analytics firms, the robustness of their work cannot be assessed as it is not publicly available.**73 What sort of data exists on credit scores generated by collecting internal transactions of SGs? For SGs, NGO promoters only collect information about their numerous SGs at the group level (BFA, 2013a: 13). Active SG members certainly document their transactions and some do so via mobile apps. These data could be harnessed to predict credit scores. One mobile product, called ‘Ledger Link’, is helping groups build a credit history with Barclays by enabling them to submit digital records of their savings and loan activities. After six months of saving with Barclays, these records can be used to assess the group’s credit score and provide access to an overdraft facility (Barclays, Plan UK and CARE International, 2016: 19). Such data could also be used.

**From interviewing providers, CGAP drew lessons on early errors made by digital credit pilots concerning credit scoring and beyond.** Offering digital credit (or any financial services) without a strong remote customer identification system becomes difficult, especially at scale. Poorly developed customer targeting could attract a high-risk applicant pool. Burdensome loan application processes that promote little demand hamper digital credit models. Often overly conservative credit scoring models limited expansion beyond a small fraction of eligible applicants, or a focus on credit scoring came at the expense of a sound collections strategy. Finally, poor

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72 http://www.cgap.org/blog/savings-groups-fuel-digital-design-smallholders-rwanda
73 For example, WSBI engaged Cignifi to explore the feasibility of using call detail records and related data to develop and refine new customer segmentation models. Combining data from customers of both HFC Bank and Airtel in Ghana, Cignifi correlated banking behaviour to mobile phone usage to gain an understanding of mobile customers’ lifestyles, financial capacities, and potential interest in various forms of financial products and services. Mobile phone usage data allowed them to qualify and target underserved customers for financial inclusion, it does not allow for deriving at a credit score. A credit score is supposed to reflect the likelihood of default of a borrower. Note that the company also claims to be able to predict credit scores of mobile phone data. However, the white paper that is publicly available on this research does not include credit scores on anything on the likelihood of default.
product design made some product offers unappealing. CGPAN highlights the example of a transfer fee being charged for moving money to and from a mobile money account.\footnote{www.cgap.org/publications/proliferation-digital-credit-deployments}

2.5.4 The village agent model as a marketing channel

What role can village agents play in a linked SG model? Does their involvement improve acquisition costs? How are they paid and who do they need to be employed by to be most effective?

As recently as 2012, Rippey (2012, p.9) wrote ‘It is too early for anyone to claim to know the best practices in linkage. There has been too little experience.’ While we concur with this statement, publications on village models and their experiences are to be introduced in this subsection. Whatever the linkage model, NGOs, implementers and facilitators can play a powerful role in facilitation.

Given their importance for sustainable service delivery, there are studies on different village agent models – some are anecdotal or in the form of project evaluations or technical series by facilitating agencies, others in the form of a few peer-reviewed studies. Rather than recount their entire content here, we will make reference to them. Unfortunately, the review did not render any results as to acquisition costs under the different models. While there are studies on the cost-effectiveness of different facilitators’ village agent strategies, these refer to group formation (and education) and not to the linkage effort (which includes the cost of opening accounts, etc.). Note also that many of these studies are focused on answering demand-side questions, studying the impact on SGs and user of different village agent models.

Pioneered by CARE in 2001 in the Niger, the village agent model consists of field officers identifying a handful of SG members capable of becoming trainers. CARE called these people village agents. The field officers then became the trainers of village agents, supervising them until they were competent to train groups on their own. Sometimes the village agents were volunteers and sometimes they received project stipends. Now, increasingly, they receive their income from fees paid by the groups themselves. The result has been the establishment of a training and support capacity embedded in the local community, able to fund itself from fees, with no long-term technical support needed from a facilitating agency. The model has become central to the growth and outreach and cost-reduction strategies of most facilitating agencies. A very approximate estimate derived from the experience of CARE and Plan indicates that using village agents (who work under a field officer’s supervision) doubles the number of groups that can be formed when field officers alone are used (Allen and Panetta, 2010).

The programme scale for facilitating SGs is determined by the multiplication of groups through low-cost avenues. Allen and Panetta (2010) describes different delivery channels in detail and provides lessons for the replication of village agent models. It includes details on ratios and performance figures. It illustrates how SGs can absorb training costs over time as

\ldots training is shifted from paid field officers (FOs) to community-based village agents (VAs), who are paid by the groups. Facilitating agencies have found creative ways to drive down costs of SG formation and introduce self-financing models that can be replicated successfully. Experience to date in Africa indicates that some of the best local agencies can deliver good quality savings groups at a per capita cost of $11–$12. Facilitating agencies, working to train and supervise local project partners, have average per-capita costs that range from $18 to $48.\footnote{Note that SEEP (2010) also includes an annex illustrating the main differences in approach to service delivery across major facilitators (Aga Khan, CARE, CRS, Oxfam, PACT Plan) (as at 2010), the role of village agents and how facilitating agencies make use of this model.}
Earlier, Allen and Panetta (2010) had revealed only a slight difference in the quality between groups trained by FOs and those trained through this replication approach (i.e. by VAs). The latter have about the same membership as the former, comparable savings rates and numbers of outstanding loans and attendance rates that are, on average, only slightly lower. In addition, groups replicated by villagers have adopted the same management structure as those trained by FOs, including seasonal adjustments to savings and the use of fines for non-compliance with established group rules. The major difference was productivity: FOs trained 51 groups during the period of study, while VAs each trained an average of five groups. This is unsurprising, according to Allen and Panetta, in view of their limited time and ability to travel. In 2008, Oxfam/FFH started shifting to ‘structured replication.’ Allen and Panetta (2010) finds in a very approximate estimate that the experience of CARE and Plan indicates that using VAs (working under a field officer’s supervision) doubles the number of groups that can be formed when FOs alone are used.

**Having changed its approach in 2008/09, CRS is the only facilitating agency whose FOs (paid local agents) evolve into private service providers (its name for VAs) (CRS, 2013).** In the traditional model, agents are recruited at the beginning of the project, and are paid by the project to form groups. When project funding ceases, agents separate from the project, as they lack the financial incentive to continue. Unlike the other agencies, CRS does not start out using external agents to train groups. Instead, it recruits field officer candidates from the community. Training is followed by nine to 12 months of supervised work in the field, a formal review, an examination and, finally, certification. Once certified, the trainees are designated as private service providers and work independently, charging groups for their services. CRS assists its private service providers to form informal networks. CRS thus prepares agents to become independent service providers operating on a market-led basis, in a bid to ensure the long-term obtainability of SILC services post-project. The NGO claims that 94% of a representative sample of SILC groups in East Africa continued operations after three years (CRS, 2013). Allen and Panetta (2010, p.23) claims that ‘of all the facilitating agencies, CRS has created the most structured, program-wide concept for a sustainable delivery channel; it is also the most cost-conscious, balancing the need for a coherent structure against the need to operate as economically as possible’. Evidence from Zanzibar, however, contradicts this, suggesting that when structures are formalised they become costly, which may lead VAs to focus more on increasing fee income from existing groups than expanding outreach (Allen and Panetta, 2010). An experimental study on the FA and the PSP model would shed light on both the development impact and cost-effectiveness of the model.

**An RCT study in Kenya, Tanzania and Uganda that compared two delivery methods (PSPs and FAs) found that SG members may be influenced in their inclination toward business investment and use of credit and savings for investment by the delivery model.** In particular, the private provider model involves a trainer who is paid a fee by the groups trained while the facilitating FA received a stipend from the implementing organisation. Therefore, the latter has more security and stability, while the private agent is more entrepreneurial and engages with the groups more through a market perspective. Similarly, field agent-trained groups are engaging in more conservative and secure livelihoods activities compared to households in private provider-facilitated areas. Private provider-facilitated households tended to take on more credit and bigger loans from banks and MFIs, showing a higher ability to use semi-formal and formal finance compared to field agent-facilitated households. Private provider-facilitated households were also saving more using semi-formal saving devices like their SGs.

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76 Replicators, or village agents, are formally trained and supervised before being allowed to expand their client base. Oxfam’s field officers recruit village agents from the groups, with one per village. They are provided with a three-day training course, a pictorial manual and a certificate at the end of the workshop. Newly certified ‘replicators’ organise and train new groups until their home village is saturated. They use Oxfam’s structured curriculum and formal manual to train the replicators on the group formation process. The replicators use the pictorial manual to form groups. This replication process is an approach that was later shared by CARE, CRS, and Plan. PACT-WORTH does not use the model.
mobile money and banks, while field agent-facilitated households used more informal services such as ROSCAs, ‘friends’ and ‘hiding places’. Private provider-facilitated households also tended to use their savings for business activities and investments. The study includes more findings on the consumption and savings behaviour of households – even on the propensity for leadership and activism – in SGs facilitated by the two different models, which are of interest to FSPs considering linkage (Ferguson, 2012).

**The choice of financial linkage model of FSPs and SGs is affected by their different inclinations on investment (and the use of credit and savings for it).** The evidence suggests that by means of the choice of the facilitating agency’s model, the tendency for precipitated shifts to credit for SGs could, or may not, be addressed more effectively. Rippey discussed why the ability of the facilitating agency to exercise its moral responsibility is limited, suggesting that the project cycle is usually too short for facilitating agencies to exercise their moral responsibility because problems due to linkages are likely to develop after the end of a project. In other words, problems with external debt usually take several years to develop, and that is a period longer than the typical length of a project. By the time there are problems, it is likely that FOs will have left and found new jobs. An agenda for further research would explore what weighs heavier – the effect on household leverage that the PSP model apparently has or the prudence and presence of the private provider.77

**There are also relevant findings in the following publications:** CARE (2010), Rippey (2011), Rippey (n.d.)

### 2.6 Product offer and pricing

#### 2.6.1 Loans versus a broader range of financial services

For FSPs, the potential interest income from providing credit typically far exceeds the potential float income from savings account balances. In their analysis, BFA (2013) outline a business case and incentives for FSPs and MNOs that derive from savings-only linkage scenarios. The authors note that while strong incentives for SG linkages exist, there are concerns about scenarios that would attempt to move participants into credit too quickly. Such concerns about financial linkage leading to a precipitated shift to credit that could overwhelm SGs and their members – many of whom have never been exposed to formal financial services before – are valid.

**There is ample evidence of failed financial linkages of SG, many of which were driven by a hastened or unsustainable shift to credit:**

- With reference to the first bank linkage attempts of SGs in Niger, Rippey (2012: 9) writes that ‘most bank linkage efforts also trace some of their design to the same project, which in 2004 started introducing their SGs to MFIs and SACCOs, and encouraging them to borrow. That project was largely a failure, for complex reasons, among which was too much loan capital chasing too few viable investment opportunities’. Indeed, in Niger, MFIs provided a large number of CARE’s SGs with credit without direct CARE facilitation. While MFI loans outstanding to SGs grew quickly, after three years they started to decline again in the face of massive defaults. Over-indebtedness and multiple loans to the same group were common. Many groups failed or at least lost members. In all the SGs that were linked to MFIs that were studied by CARE Niger, membership declined. The studies found that the worse the experience, the greater the drop-out rate. Groups that were not linked retained their membership or increased it (Rippey, 2008).

- Ballem *et al.* (2012) found evidence of overwhelming debt as a major reason for SG drop-out for SHGs in India: ‘Group credit is extended based on the SHG’s savings cycle rather than on the

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borrowing capacity of members. In addition, as a condition of extending credit, banks often block the SHG from accessing savings stored in the bank. In a study by MicroSave, 47% of SHG members named default of another member as the primary reason for dropping out of an SHG themselves—they and fellow members were either unwilling or unable to bear the debt of other group members. And because bank savings are often blocked until bank loans are repaid, many SHG members admitted to seeking credit from other, more expensive sources instead.

- CARE’s experience suggests that SG members are cautious of FSPs. In Kenya, most groups did not link until CARE assured them it was safe to do so and were further reassured by group participation in the development and testing process. Consequently, NGOs have adopted a focus on demand from groups rather than supply from institutions as a guiding principle.

**It has been pointed out that SGs and their members may have limited capacity for investment and debt and that the product offer should therefore be adjusted.** The 2007 FinMark Trust/FinScope studies of Uganda, Tanzania and Zambia all indicated a similar hierarchy of priorities for both savings and credit services (in descending order of importance): meeting basic needs, emergencies, education of children, and business investment. Some 15% prefer to use credit and 19% prefer to use savings for these purposes. In most cases SG members are more interested in using savings for household cash flow management rather than starting up small businesses (Allen and Panetta, 2010). BFA’s analysis likewise suggests that SG–bank linkages should begin with deposit opportunities and that credit should only be added gradually and cautiously as the effect on SG members comes to be better understood (BFA 2012b)

**As an NGO involved in facilitating financial linkage, CARE International gives guidance on what product features are advisable, both in terms of consumer protection and reaching scale** (see, for example, CARE International (2013), CARE International (2011a) and CARE International (2011b)). Ultimately, what FSPs offer to SGs will be at the cross-section of customer preferences and willingness to pay and FSPs’ own revenue-generation and cost-reduction strategies. The results are reflected in the State of Linkage Report, which includes a table of linkage activity that includes projects and the products that they offer. BFA recommends savings products for which there is no minimum balance, or no monthly fee, intended to cater to the needs of first-time account holders with fewer financial assets (BFA, 2012a). Accenture and CARE (2015) recommends MNOs develop entry-level products to grow the customer base. For customers of mobile financial services, payments pose a typical entry point into financial inclusion and thus providers’ entry strategy consists of providing simple, low-cost savings accounts. Examples include Nedbank and Standard Bank in South Africa with their respective Ke Yona and Access accounts, Kenya Commercial Bank with M-Benki and Equity Bank’s group accounts, where deposits and withdrawals at Equity agents are free and withdrawals at Equity ATMs and branches and transfers between Equity accounts carry fees of KES 30 or 50 (US$0.30 or US$0.50). The figure below illustrates what CARE has done in the past. In terms of product offer, the NGO is currently considering linking to individual members. Group services build important financial skills that prepare members for more sophisticated products. CARE is exploring connecting individual VLSA members to mobile money accounts, interest-bearing savings accounts, insurance products and even individual credit for small business use. Moreover, CARE is developing new linkage products. VLSA clients demand long-term schooling as well as pension schemes. CARE might explore working with governments and providers interested in extending these services to VSLAs (CARE International, 2012).

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78 CARE is an example of such an NGO.
2.6.2 Pricing of financial services for the unbanked

No information on the capacity of DBL organisations or other financial intermediaries to price at break-even point was found. No information was found on the provision of services priced at average or variable cost for the remote or very poor SGs.

On the demand side, it must be mentioned that the experience of Airtel in Uganda showed high sensitivity to transaction costs. The target population for the group wallet (and possible group account) proved very price-sensitive as some were already familiar with mobile money and the costs to use it. Airtel Uganda therefore instituted a fee structure similar to Airtel Money’s existing fee structure for group mobile wallet transactions: deposits are free, but transfers and withdrawals incur a charge. Airtel Uganda and Grameen Foundation ensure that when SGs are trained to use Airtel Weza, they are encouraged to compare the transaction fees to the cost of travelling to the bank and to consider the increased security that the mobile money solution offers.

However, detailed cost structures are likewise rare to find as private providers typically do not share them. If the pricing of a financial service was based on operational costs, FSPs are reluctant to share the cost data. Likewise, if the permissible cost of a financial service was derived from reverse-engineering the results of a market study, FSPs are reluctant to share the results of said study. Collecting market data is habitually expensive and FSPs who have done so usually want to keep it confidential to protect their commercial advantage in having collected it. CGAP found that MNOs are unwilling to share data on their number, type and volume of transactions, active customer base and overall profitability while commercial banks are reluctant to share total numbers on segmented customer bases, overall profitability, loan portfolios, deposit portfolios and ATM transactions. National efforts to collect demand-side data often produce detailed data sources but the data are not standardised from one country to the next, limiting the ability to aggregate or compare metrics.79

Nevertheless, what has been observed is that the administrative costs are the main cost component in the MFI business model. IFC found this based on MIX data. Administrative costs are highest even for operationally sustainable MFIs. Thus, a cost-effective infrastructure, as in the form of branchless banking, is crucial. 80

Moreover, the profitability challenge for FSPs targeting small savers is well known and covered in the literature. Collecting small savings deposits in the traditional banking

80 www.aba.org.tw/images/upload/files/BrigitHelsinki8I.pdf
model requires large numbers of savers accessing MFI branches, is cost intensive, and provides very little funding to the FSP.\textsuperscript{81}

\subsection{2.6.3 Provision of free and at-cost services}

The State of Linkage Report lists several services that are typically or often features of SG products and that are provided for free or at a low cost.\textsuperscript{82} These are SMS notifications, internet banking, ATM cards, free withdrawals, group passbooks, no account fees, and no minimum balance requirements. While the following list is not fully comprehensive in terms of what could be provided for free to consumers, it provides a useful indication of what the financial services market is offering in terms of group products.

\textbf{Table 1: Group linkage products with explicitly marked free features}

<table>
<thead>
<tr>
<th>Main distribution network/s</th>
<th>FSP(s)</th>
<th>Type(s) of FSP</th>
<th>Other partner(s)</th>
<th>Product Description</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank</td>
<td>FNB</td>
<td>Commercial bank</td>
<td></td>
<td>Stokvel account: a branch-based group savings account \textbf{offering 10 free transactions per month} if average balance is above US$ 400.</td>
<td>South Africa</td>
</tr>
<tr>
<td>Bank</td>
<td>Standard Bank</td>
<td>Commercial bank</td>
<td></td>
<td>Society Scheme account: a branch-based savings and cheque account allowing \textbf{free deposits via cash or cheque and two free cheque withdrawals and two free cash withdrawals for the group each month}. No monthly service fee on balances over US$ 300.</td>
<td>South Africa</td>
</tr>
<tr>
<td>Bank</td>
<td>ABDA (Barclay)</td>
<td>Commercial Bank</td>
<td></td>
<td>Club account: a branch-based savings account offering tiered interest rates, \textbf{no monthly charges and reduced fees}. Must give 32 days' notice before withdrawing funds.</td>
<td>South Africa</td>
</tr>
<tr>
<td>Retail</td>
<td>Barclays</td>
<td>Commercial bank</td>
<td>CARE; Plan</td>
<td>Ujasiramali Account: a basic savings account with \textbf{no minimum opening balance and no account fees}.</td>
<td>Tanzania</td>
</tr>
<tr>
<td>Bank/MNO</td>
<td>Mwanga Community Bank; Vodafone</td>
<td>Rural or community bank; MNO</td>
<td>CARE</td>
<td>Savings account linked to a mobile wallet, offering \textbf{free cash-in with fees for withdrawals at mobile agents.}</td>
<td>Tanzania</td>
</tr>
<tr>
<td>Bank</td>
<td>National Microfinance Bank</td>
<td>Commercial bank</td>
<td>CARE</td>
<td>Group savings account with \textbf{no minimum balance, no management fees}, and 3% interest per annum.</td>
<td>Tanzania</td>
</tr>
<tr>
<td>Bank</td>
<td>Bank of Africa Uganda</td>
<td>Commercial bank</td>
<td>CARE</td>
<td>Savings account with an opening/minimum balance of UGX 10,000, \textbf{no monthly fees, free deposits, and no minimum account balance to earn interest}. Other benefits include a VSLA Chama deposit book, financial literacy seminars organised by the bank, and access to loan facilities after having consistently saved for six months with the bank.</td>
<td>Uganda</td>
</tr>
<tr>
<td>MNO/Bank</td>
<td>Barclays; Airtel</td>
<td>Commercial bank</td>
<td>CARE; Plan; bank; MNO</td>
<td>Group savings account with \textbf{no account fees} and interest on savings. Groups are able to apply for an overdraft facility after six months of saving in their account. Groups can also sign up for mobile apps that allow them to send digital records of their savings and loan activity to the bank, or use an Airtel</td>
<td>Uganda</td>
</tr>
</tbody>
</table>


\textsuperscript{82} Specifically, the report indicated that these services outbalance impositions such as minimum balances and low fees.
<table>
<thead>
<tr>
<th>Main distribution network/s</th>
<th>FSP(s)</th>
<th>Type(s) of FSP</th>
<th>Other partner(s)</th>
<th>Product Description</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank</td>
<td>FINCA</td>
<td>MFI</td>
<td></td>
<td>mobile money wallet to make deposits/withdrawals through mobile money agents.</td>
<td>Uganda</td>
</tr>
<tr>
<td>Bank</td>
<td>Opportunity Bank</td>
<td>Commercial bank</td>
<td>CARE; Stromme Foundation; MBUGO/ LWR; NUDIPU; AVSI</td>
<td>Savings account for SACCOs, groups, associations or clubs with a UGX 50,000 opening balance. Free-of-charge withdrawals and deposits at all FINCA Uganda branches and POS locations across the country; UGX 1,000 monthly maintenance fee. A short-term or medium-term credit facility that can be accessed through a group with a minimum of five and maximum of 10 active entrepreneurs owning individual businesses. Loan amounts of up to UGX 10,000,000, flexible repayment terms, periods of 4–8 months, and no collateral requirements.</td>
<td>Uganda</td>
</tr>
<tr>
<td>Bank</td>
<td>Barclays</td>
<td>Commercial bank</td>
<td>CARE; Plan</td>
<td>A community account with no minimum opening requirements, no account opening fees, and no fees for deposits or withdrawals. Groups receive free monthly statements and a chequebook. Interest is paid for balances above ZMK 5,000.</td>
<td>Zambia</td>
</tr>
<tr>
<td>Retail</td>
<td>Ecobank</td>
<td>Commercial bank</td>
<td></td>
<td>Savings account with no monthly charges, free withdrawals and interest earned on savings (3% after three months). Initial deposit and minimum account balance of ZMK 500 required; a monthly charge of ZMK 35 is applied to balances below this.</td>
<td>Zambia</td>
</tr>
<tr>
<td>Bank</td>
<td>Zambia National Building Society</td>
<td>Housing bank</td>
<td></td>
<td>The Musika group savings account has a minimum opening balance of ZMK 20, a minimum balance of ZMK 10, no maintenance fees, and offers access to group loans.</td>
<td>Zambia</td>
</tr>
<tr>
<td>Bank</td>
<td>Zambia National Savings Bank (NATSAVE)</td>
<td>Commercial bank</td>
<td></td>
<td>The Regular Savings Account has no monthly fees and an opening/minimum account balance of ZMK 50. Withdrawals cost ZMK 5 and the account must remain active on a monthly basis or be suspended. The Rural Savings Account has no monthly fees and a ZMK 20 opening/minimum balance. Growth Savings Account has a minimum balance of ZMK 30. Withdrawal allowed three times in a year.</td>
<td>Zambia</td>
</tr>
<tr>
<td>Bank</td>
<td>Canara Bank</td>
<td>Commercial bank</td>
<td></td>
<td>Credit product with loan amounts based on value of savings; varies from 1:1 to 1:4 leverage. Canara Bank also has a microfinance training institute to train SHGs.</td>
<td>India</td>
</tr>
<tr>
<td>Bank</td>
<td>Kotak Mahindra Bank</td>
<td>Commercial bank</td>
<td></td>
<td>Transactional and term deposit accounts with free cash deposits, withdrawals and monthly statements; phone banking and internet banking available.</td>
<td>India</td>
</tr>
</tbody>
</table>
For those FSPs that partner with an MNO, is the mobile service provided for free? This cannot be conclusively established for the report but should be studied further. What is evident is that there are different models. For example, in Kenya’s PostBank cooperation with CARE International and Safaricom (M-Pesa), the Save As You Earn account is a contracted savings account for groups of four or more people that has a minimum monthly contribution (per group) of around US$ 5. The account pays a tiered interest rate and does not carry a ledger fee. Groups can make deposits at PostBank branches, M-Pesa agents or PostBank agents.

A number of NGOs that facilitate group formation have recommended that FSPs absorb the cost of going digital for SGs and their members (BFA, 2013). Whether these features can be added on at a low cost to the FSP is uncertain. However, FSPs that have instrumentalised mobile technology for reaching remote clients are most likely to achieve scale, according to CARE. FSPs that are open and have strategically created a role for mobile technology have been the precursors in loan product expansion and linkages (CARE International, 2013).
2.7 FSPs

2.7.1 Group product markets

In their analysis of the market for linkage products for Barclays, Plan UK and CARE International, BFA (2016) found that the main distribution network for linkage products was the banks (67%). This was followed by MFIs (19%), Bank/MFI and MNO (6.5%), technology platforms (2%), and retailers with a banking licence (1%). Whereas mobile money has driven an increase in individual account ownership, the State of Linkage Report indicates that formal financial institutions – including commercial banks, government and development banks, and MFIs – are playing a more prominent role in the delivery of group financial products.

Retail banks rather than MFIs make up the market and local banks are drivers. Nearly two-thirds of the linkage products were offered by retail banks (including commercial banks, credit unions, rural banks, housing banks, cooperative banks and postal banks) instead of MFIs. Barclays, Plan UK and CARE International (2016) concludes that this underscores the notion that there is a solid business case for banks to develop products and services for SGs. A further 20% of group products are provided by MFIs, and 7% are offered by government and development banks. Linkage appears to be driven almost entirely by banks operating at a local or national level.

Financial intermediaries, including DBL institutions (MFIs, savings banks, community banks, cooperative banks, etc.), vary in the degree to which they are equipped to link to SGs. Banks do not have adequate branch networks or technologies and favourable credit conditions for pro-poor sectors are not mandatory. One reason why SG linkage might not be interesting to companies other than DBL institutions is the fact that refinancing for pro-poor loan portfolios is not available in Africa (Allen and Panetta, 2010). DBL institutions, on the other hand, have access to donors and concessional lending from bilateral and multilateral lenders. As a result, the formal sector is reluctant to lend to SGs, with the exception of institutions that have a clear pro-poor mission.

2.7.2 Cost of group formation and linkage

As discussed previously, there is little information on customer acquisition costs available. Some examples are known in which an NGO funded the expenses for linkage (CARE, Equity and Orange in Kenya) and in most cases linkage occurs with groups that were facilitated or trained by an NGO. In its business case formation, BFA pointed out that while an estimated 3.65 to 3.9 million SGs were promoted throughout East Africa, one of the stakeholders of the Digital Linkage Value Chain (banks, MNOs or NGO promoters) would have to...

... take on the responsibility of identifying SGs which are ready for linkages, training SGs on the linkage process and on mobile financial services (as well as customer recourse mechanisms), navigating complex account opening procedures such as preparing KYC documentation, and engaging with regulators to ease the process of working with SGs. True scaling may also require new SGs to be formed. All of these activities are currently handled by the NGO promoters, who are familiar with the process of SG formation as well as the challenges of introducing complex financial topics to low-income, rural individuals) (BFA, 2012b, p.19-20).

For details on the expenditures of different NGOs, see Zollmann (2009). The author observes that, unlike MFIs, implementing organisations make no claim to recovering their costs. Thus, scaling up an SG facilitation programme will require greater efficiency in per member costs.

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83 This is the case in Africa, with the possible exceptions of Rwanda, South Africa and Malawi.
In order to access findings on an example wherein an FSP conducted a broader range of linkage services (including some usually taken on by NGOs), we look to the example of PostBank in Uganda.\textsuperscript{84} Cooperating with an MNO, the bank uses money transfers as part of its market strategy. In parallel, PostBank Uganda is developing a network of bank agents, i.e. small business owners who carry out banking transactions in addition to their normal activities. Its strategy is marked by extensive outreach in remote and rural areas, banking vehicles that serve several locations apiece, and this agent banking model. The bank is striving to link with local NGOs to deliver financial literacy training to clients. Under the Doubling Savings Account Programme,\textsuperscript{85} PostBank Uganda conducted a market study (in order to segment and adapt its product and services range) which found that a third of its clients were farmers in need of products that are adapted to their business cycle.

Case studies on business models focused on clients at the bottom of the pyramid are arguably helpful here. What do these studies mean for FSPs? It has been described that branchless banking allows for a rapid expansion of the volume of users and accounts because it builds on existing infrastructure (agent models, cell phones, etc.). There is no investment in capital expenditure investment necessary other than the group formation, facilitation and financial education – all costs specific to SGs. Thus, linkage to facilitated SGs via existing infrastructure should be cost-effective.

Note that NGOs do not charge their members for formation or linkage services and have no pressure to amortise them. Rural financial institutions (RFIs) or FSPs for that matter will have to find a business model that represents a compromise between the customer’s willingness to pay (for financial services) and their cost of acquiring and maintaining accounts. Since data on acquisition cost are scarcely available, an alternative approach would be to look at the operational cost of MFIs and derive at implications for pricing from there.

2.7.3 MNOs as FSPs

MNOs face certain limitations and these limitations are particularly restrictive for SG access as the amounts saved and withdrawn are higher than for individuals. Among the limitations MNOs face (neglecting limited mobile coverage) are regulated limits placed on the amount of funds that can be stored in m-wallets and the fact that they charge their customers high transaction fees. From an operational point of view, liquidity management is a challenge for MNOs. In its experience in Tanzania, CARE arrived at this conclusion after realising that M-Pesa agents provided limited liquidity for the relatively large withdrawals that SGs wanted (as compared with the typical withdrawal size of an individual) and that many SGs and their members wished for access to other financial products (CARE International, 2013).\textsuperscript{86} Research from BFA (2012b) points to the fact that balancing cash and e-floats among agents is a challenge to MNOs – in some countries more than in others. Consequently, BFA identified liquidity management (along with cross-selling opportunities and a reduced churn of customers) as incentives for digital linkages of SGs to MNOs.

While MNOs can provide incentives that are attractive in terms of customer acquisition (easy access to account information, proximity of mobile network agents, mobile wallets, low-cost platform on which to host stored value accounts and lower, cost-effective KYC and onboarding of new customers), there are important limitations in terms of the liquidity challenges that operators and associated agents

\begin{footnotes}
\item[84] https://retailbankingblog.wordpress.com/2012/12/17/postbank-uganda-to-boldly-go-where-no-bank-has-gone-before/
\item[85] Conducted by WSBI with funding from the Bill & Melinda Gates Foundation.
\item[86] CARE has both types of partnership – one with Vodacom Tanzania, a MNO providing savings groups with access to a basic mobile wallet and payment service, but not offering savings or loans products; and one with Vodacom and Mwanga Community Bank providing savings groups access to banking products via their mobile phones.
\end{footnotes}
face. Depicting the mobile money agent liquidity cycle, BFA points out the discrepancy between withdrawals and deposits: “MNOs profit when mobile money clients withdraw from mobile wallets and pay a withdrawal transaction fee. This profit accrues even after paying the mobile money agent commission. On the other hand, deposits result in a loss—not only do customers deposit for free, but MNOs must also pay agents a transaction commission. However, in order to profit from withdrawals, agents must have steady and sufficient cash to meet customer needs as and when they arise. In many markets, mobile money agents have not enjoyed a great deal of confidence, partly due to lack of liquidity when clients want to perform cash-in or cash-out transactions. (BFA, 2013).

That said, numerous SG deposits and withdrawals may provide a source of liquidity management for MNOs or banks that manage agent channels (BFA, 2013: 12). Agent networks are the underlying infrastructure that supports cash-in and cash-out services and are thus the gateway for digital financial services transactions. Agents are typically located in retail locations (such as pharmacies, small stores and petrol stations) and receive a commission for the services performed. For banks and MNOs that manage agent models, SGs—many of which have fixed, committed savings amounts—would provide a predictable source of cash that could be used to coordinate liquidity among agents (BFA, 2013a). In some cases, super-agents or agent aggregators manage agent networks. These are typically third-party businesses. In some cases they exist solely to manage the network, while in other cases they are the wholesale distributors to the small stores or owners of a franchise chain where each franchisee is an agent. Super-agent duties may also include customer experience management, training, reporting and, most important, liquidity management. In very large agent networks, up to three levels of super-agents can exist, and they earn revenue through fee sharing with their agents on each transaction.87

Managing deposits can be expensive, requiring scaling up operations and hiring more staff to meet needs that are very different from lending. It also comes with a whole new set of risks, including liquidity and asset-liability matching, and greater regulatory and compliance burdens that governments—appropriately—impose on deposit-taking institutions (FAI, 2015).

No evidence on the propensity of one linkage model (FSP and SG) versus another (FSP, MNO and SG) to deliver better liquidity performance was found. However, studying the following publications and the market data they include might be a start to explore the question through primary research.

- Mutesasira et al. (2000). This report compares user-owned or ‘common-bond’ MFIs in West and East Africa with special emphasis on the savings services they provide. The Caisses Mutuel and the Caisses Villegoises of West Africa are recognised internationally as successful MFIs operating in difficult environments. In addition, many of these West African MFIs have been delivering savings services to their clients as an integral part of their systems. At the same time, the vast majority of financial services for the poor in East Africa are provided by SACCOs or Credit Unions, but the work, capabilities, strengths and weaknesses of these remains largely unexplored and poorly documented.88

- Thorat and Wright (2006). This MicroSave note discusses the vast networks of cooperatives delivering financial services in India. The overall financial performance of the cooperatives is weak when compared to commercial banks in India. The note identifies the reason as the weak links in the cooperatives, which are primarily related to governance, restrictive membership and voting rights, dominance of borrowers on the board, the lower lending rates of PACS (well below the market rates), high transaction costs owing to business model issues, overstafing and salaries unrelated to the magnitude of business. It suggests improving the governance and

88 www.microsave.net/resource/a_comparative_analysis_of_member_based_microfinance_institutions_in_east_and_west_africa#.VtLZ443nnkkk
management of the cooperative network, including its basic systems and procedures as a critical support for its success.⁸⁹

- Matthews and Devi (2009) address the issue of the lack of audits of SHG balance sheets. Their research highlights the fact that SHG members are unable to use SHGs as a reliable source of savings because they cannot be sure that all their deposits are accounted for. Furthermore, they point out that without proper control systems, SHG savings are exposed to abuse. The authors argue that ‘Unless they balance annually, SHGs should break every 2-3 years by providing an unconditional cash-out opportunity ... to all members.’ This note also provides an array of management tools to SHGs and advice on what banks should do before lending to them.⁹⁰

2.7.4 Development impact of linkage models

There were no data on the development impact or effectiveness of different linkage models available. Such data will emerge as more and more linkage models are evaluated.

For an MNO, partnering with an MFI or other DBL institution would be expected to be preferable. As MNOs raise their revenues from transaction fees (rather than deposits) partnering with a DBL institution that is more interested in outreach is preferable to a cooperation with a commercial bank. The research found relatively few examples of MNOs adapting or developing new mobile services for SGs. In the absence of mobile products, SGs must rely on the financial institution’s own distribution networks – typically bank branches or bank agents – to access their accounts, a process that is generally less convenient and more expensive for both parties. Only 12 of the products identified in the State of Linkage Report are linked to a mobile money product of some kind; this includes seven products that use mobile money services to link groups to an account at a bank or MFI and five products that are wholly owned by MNOs (i.e. not linked to a group account at a bank or MFI) (Barclays, Plan UK and CARE International, 2016: 9). Case studies on organisations that are already taking a collaborative approach (i.e. digital financial linkage) include Barclays, Grameen and Airtel in Uganda, Fidelity and MTN in Ghana, and FINO Paytech in India. For an NGO, partnering with a DBL organisation providing credit and other formal financial services to SGs and their members is interesting as long as NGOs need not be concerned about a precipitated shift to debt. However, as CARE (2011, p.7) notes ‘there seems to be some tension between the FSP interest in scale and profitability and CARE’s interest in the group’s readiness, capacity building and more cautious approach to loan products. Balancing of interests and trade-offs will need careful management.’

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⁸⁹ www.microsave.net/resource/cooperatives_the_flawed_gem_of_indian_rural_finance#.VtLaAY3nkkk
⁹⁰ www.microsave.net/resource/shgs_should_balance_or_break#.VtLaFo3nkkk
3 Conclusion and agenda for further research

This evidence mapping has sought to broadly answer questions on which financial services and channels are most valued by the financially disadvantaged and what drives the business case for providers to serve them. In many examples, it has been shown that success can be found by creating formal account mechanisms that adapt ideas from ISMs.

We have mapped evidence on the 11 supply questions and 15 demand questions (see Annex 1) and based on this have developed the following learning questions that will be studied further in the course of the SatF project.

We hope this review will inform practitioners, including FSPs, seeking to work in this market, as well as encourage researchers to address the gaps in evidence that have been identified.

3.1 Learning questions

1. What are the different segments of users/clients of the ISMs and how do they differ from each other?
   a) What are the profiles of different client segments? How big are these segments, and what is the approximate value being stored in savings?
   b) How have the varying degrees of informality and the group model and set-up influenced people’s need for and expectations of financial services from formal and informal FSPs? What do members value about ISMs?
   c) What are the different levels of readiness for a commercial relationship across the client segments, i.e. what are the pre-requisites for different types of ISMs’ member segments and an FSP to have a successful commercial relationship?
   d) What are the preferences and perceptions of users of ISMs toward formal institutions? What financial services do they use and where might a linkage to a FSP add value?

2. How do the financially excluded and underserved users (e.g. women, young people, people with disabilities, smallholder families and people living in remote areas) of ISMs respond to linkage experiences and opportunities and how can the mutual value proposition of linkage for ISMs be shared with FSPs?
   a) Why do members choose to stay or leave their groups post-linkage? How do formerly informal savings users now linked differentiate from what is already happening with digital finance and the spread of mobile money/agent banking? How does the provision of services that communities facilitate for themselves (i.e. self-intermediation) compare to the formal services being offered (institutional intermediation) directly to individual customers and through groups?
   b) What can we learn about people’s decision-making factors (drivers) in choosing between formal and informal options when they have access to both (i.e. how do they create their optimal basket of products)?
   c) What are the effective strategies that lead to greater uptake and usage of linkage, including developing trust in FSPs and their products?
   d) What is the added value, if any, to ISM members of being linked and the mutual proposition value for both ISMs and FSPs? Does linkage lead to more saving or shifting savings from ‘under the mattress’ to the bank account? What is the impact of linkage on resilience?
   e) Specifically, in what ways does the linkage support or undermine the model of the group, i.e. what are the benefits, costs and risks in alternative scenarios (once the

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91 Alternative set-up models include: facilitated by NGOs and other promoters; non-facilitated; formed by financial institutions.
acquisition cost is justified and the members have access to formal services, what perpetuates the group)?

f) What is the trajectory of users of ISMs post-linkage?

3. **What can we learn from the SatF-supported models on how best to serve the financially excluded and underserved?**
   a) To what extent are the SatF models reaching the financially excluded and underserved?
   b) What are the trade-offs, if any, between the viability of a business case and serving different segments of the poor?
   c) What are the characteristics of the users of ISMs and FSPs that end up accessing linkage and those who benefit more from linkage?

4. **What are the challenges and opportunities for financial institutions to contribute toward and manage the formation and acquisition of ISM users and how can the mutual value proposition of linkage for FSPs be shared with ISM users?**
   a) What is the business proposition of group acquisition compared to ‘traditional’ individual acquisition? How does this affect a financial institution’s ability to serve frontier markets?
   b) What are the financial and non-financial costs to a financial institution of assuming this? What are some incentives to do this? Can it be a financially viable proposition, and incorporated into the financial institution’s business model? To what extent is it a mutually valued proposition for ISM users?
   c) What partnerships and engagement models are required to ensure feasibility and viability, through the sharing of costs, skills, relationships, revenues and risks?
   d) What channel strategies are effective in customer acquisition from the ISM market?
   e) What is an optimum combination of and sequencing of basic group training, financial education and product training from a cost-effectiveness perspective?
Bibliography


Barclays and EIU (2010) Banking for Billions.


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MicroSave (2010b) PoP Briefing Note # 6 Portfolios of Bangladesh’s Poor. www.financialaccess.org/publications-index/2010/portfoliosbangladesh

MicroSave Briefing Note #155, *Behavioural Economics and User Centred Design – Opening up New Vistas in Research Processes*. Akhand Tiwari, Premasis Mukherjee,


Websites
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http://savingsgroups.com/
www.finmark.org.za/finscope/
http://datatopics.worldbank.org/financialinclusion/
www/fsdafrica.org/
http://finclusionlab.org/
www.fspmaps.com
www.intermedia.org/i-financial-inclusion-mobile-money/
https://gsmaintelligence.com/
www.povertyactionlab.org/evaluation/challenges-banking-poor-rural-kenya
www.socialscienceregistry.org/trials/340
www.povertyactionlab.org/fr/node/9977
www.microsave.net/resource/a_comparative_analysis_of_member_based_microfinance_institutions_in_east_and_west_africa#.VtLZ443nkkk
www.microsave.net/resource/cooperatives_the_flawed_gem_of_indian_rural_finance#.VtLaAY3nkkk
www.microsave.net/resource/shgs_should_balance_or_break#.VtLaFo3nkkk
### Annex 1: Original research questions

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<th>Demand-side learning questions</th>
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<th>Appraisal based on evidence mapping</th>
<th>Justification</th>
<th>Exemplary list of references</th>
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<tr>
<td><strong>2. In terms of how people manage their money, what do they do differently since becoming members of a savings group in terms of (a) managing their household finances and (b) managing their income?</strong></td>
<td>MIXED Some evidence – good in Kenya (financial diaries), but limited or none in most countries</td>
<td>MIXED Evidence from RCTs on savings, investments and spending</td>
<td>Thanks to Storchi’s literature review on SGs, these studies were already collected and summarised.</td>
<td><strong>-</strong> The relevant studies were already collected and summarised in Storchi’s Literature review on SGs. <strong>-</strong> Microdata from RCTs on SGs for OPM, FSDK, and the University of Bath from January 2016 <strong>-</strong> Gash and Odell, ‘The Evidence-Based Story of Savings Groups: A Synthesis of Seven Randomized Control Trials’ 2013 <strong>-</strong> B. H. Matthews, C. Musoke, and C. Green (2010) Group Savings and Loans Associations – Impact Study <a href="http://www.seepnetwork.org/group-savings-and-loans-associations---impact-study-resources-673.php">www.seepnetwork.org/group-savings-and-loans-associations---impact-study-resources-673.php</a> <strong>-</strong> Specifically on savings groups; The Financial Role of Savings Groups: Preliminary Findings from the Kenya Financial Diaries, by Julie Zollmann, Michelle Hassan, Catherine Wanjala, and Anne Gachoka</td>
</tr>
<tr>
<td><strong>3. Are people members of more than one SG? If so, how many? Why? How does multiple membership help people manage their finances and risk?</strong></td>
<td>MIXED Some evidence – good in Kenya (financial diaries), but</td>
<td>SCARCE Outside of Kenya and Tanzania, little information on the percentage of SG users with multiple memberships was found. It is often discussed that SGs are one of several instruments that are used, however.</td>
<td>FSD Kenya (2015) Quality Delivery Study <strong>-</strong> Julie Zollmann, Michelle Hassan, Catherine Wanjala, and Anne Gachoka. (Forthcoming). The Financial Role of Savings Groups: Preliminary Findings from the Kenya Financial Diaries</td>
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| 4. Has membership of SGs prompted changes in the patterns of saving, particularly for consumption, productive/ income-earning investments, children’s education and medical needs? | MIXED | MIXED | Thanks to Storchi’s Literature review on SGs, these studies were already collected and summarised. | • Storchi’s Literature review on SGs for OPM, FSDK, and the University of Bath from January 2016  
• Gash and Odell, The Evidence-Based Story of Savings Groups: A Synthesis of Seven Randomized Control Trials’ 2013  
• Specifically on Savings groups: The Financial Role of Savings Groups: Preliminary Findings from the Kenya Financial Diaries, by Julie Zollmann, Michelle Hassan, Catherine Wanjala, and Anne Gachoka  
• Savings for Change. IPA, Bureau of Applied Research in Anthropology Final impact evaluation Randomized controlled trial Mali 2013  
• Somen Saha (2014) ‘More health for the money’: an analytical framework for access to health care through microfinance and savings groups’ |
| 5. Have people changed the forms (including non-monetary) in which they save, both short-term and longer-term? | MIXED | Nothing beyond what has already been discussed. | Savings balances and their increases are recorded. It could be argued that asset ownership is a form of saving as well as investment; and evidence on it can be found under the next question. | • ‘Saving for a (not so) Rainy Day: A Randomized Evaluation of Savings Groups in Mali’, by Lori Beaman, Dean Karlan and Bram Thuysbaert. October 2014  
• Dupas and Robinson (2013) |
| 6. Have people spent more – or less – on new asset purchases? (Housing materials; Farming) | MIXED | MIXED | Thanks to Storchi’s Literature review on SGs, these studies were already collected and summarised. | • Same as above, especially:  
• Storchi’s Literature review on SGs for OPM, FSDK, and the University of Bath from January 2016 |
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<td>equipment; Seeds/ plants; Farm animals; Transport; Other assets)</td>
<td>good in Kenya (financial diaries), but limited or none in most countries</td>
<td>savings, investments and spending</td>
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<td>7. Other than access to savings and loans, what else do people value about membership of SGs?</td>
<td>MIXED</td>
<td>Reported attitudes</td>
<td></td>
<td>Gash and Odell (2013) ‘The Evidence-Based Story of Savings Groups: A Synthesis of Seven Randomized Control Trials’</td>
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<td>8. If they were not members of a SG, how else might people access the non-financial benefits they gain from these groups?</td>
<td>LIMITED/N ONE</td>
<td>Degree of research availability depending on the benefit</td>
<td>There is limited to no evidence on how benefits could be accessed – depending on the benefit. The discipline instilled by the group could be replaced by other mechanisms (the success of which is covered in the mentioned sources). The often discussed social capital would need to be substituted by other means. However, note that the RCTs on SG membership did not capture the social capital impacts (women’s empowerment, etc.).</td>
<td>Kast, F. et al. (2012). ‘Under-Savers Anonymous: Evidence on Self-Help Groups and Peer Pressure as a Savings Commitment Device,’ NBER Working Paper No. 18417.</td>
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<td>9. How have the delivery channels (e.g. mobile money) affected people’s use of both formal and informal financial services?</td>
<td>LIMITED/N ONE</td>
<td>ABUNDANT</td>
<td></td>
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<td>10. How have people (all, SG or not) learned about using formal financial services? What means of learning has worked best for them?</td>
<td>LIMITED/N ONE</td>
<td>GOOD</td>
<td>Lessons learned from projects are widely shared in the form of manuals and handbooks.</td>
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| 11. What do SG members see as the limitations and weaknesses of the groups in terms of meeting their financial needs? What do SG members see as the benefits and the disadvantages of using formal financial services in terms of (i) managing money and (ii) impact on livelihoods? (asked both before and after using them) | LIMITED Better in some countries than others. | Good evidence. | NGOs cover misperceptions and consumer attitudes. It is expected that the publication of findings from financial diaries with a focus on SGs will illuminate these questions further. | • Market Research and Product Development for Linking VSLA Groups to Financial Institutions, Kenya, MaI Consulting, January 2011.  
• CARE International (2013) New Models for linking savings groups to formal financial services.  
• BFA ‘InFocus Note 1: Do savings products at commercial banks really improve the lives of the poor?’ May 2012  
• CARE International (2013) ‘Kenya: Linking the cash box to the bank – Formal banking of savings groups through mobile money  
• CARE International. Financial Linkages: Bridging the Formal and Informal Sectors  
• BFA Focus note 1  
| 12. Have people changed the way they manage their liquidity needs as a result of linkage of their SG? If so, how? (Household finances; Enterprise finances) | LIMITED Better in some countries than others | LIMITED There is limited information on the impact of linkages. Publications document progress but are not academic and have no control group. | | • FSD Kenya (2015). Quality of Delivery study  
• Barclays, CARE International, Plan UK (2013) Banking on Change  
• CARE International (2013) New Models for linking savings groups to formal financial services |
| 13. How have amounts saved and frequency of saving changed (if at all) as a result of linkage of their SG? | LIMITED Better in some countries than others | LIMITED There is limited information on the impact of linkages. Publications document progress but are not academic and have no control group. | | • CARE International (2013) New Models for linking savings groups to formal financial services |
| 14. Have people changed the proportions of short versus longer-term savings as a result of linkage of the group? How? Why? | LIMITED Better in some countries than others | LIMITED There is limited information on the impact of linkages. Publications document progress but are not academic and have no control group. | | • Same as question above |
| 15. How low does the acquisition cost under the SG scenario decrease compared to the acquisition cost for other products? | VERY LIMITED Even mobile money acquisition costs are unclear for this segment | VERY LIMITED I agree with the assessment of the technical proposal. There is very little on acquisition cost for MNOs and FSPs available | In contrast to the learning questions on the demand side, a general observation made for the learning questions is that there is little data and evidence to answer them. There is even less evidence documented in peer-reviewed, academic journals. Development economists are more interested in the financial decisions of the poor and thus more likely to design research projects assessing this impact. Most data on the operational characteristics of different linkage models are published by NGOs, facilitating agencies, and donors and are found in project evaluations, handbooks, manuals, and the like. | • BFA Focus Note 1. Outcompeting the Lockbox – Linking Savings Groups to the Formal Financial Sector and SG Linkages – The Business Case for Private Service Providers.  
• CARE International Tanzania: Linking savings groups to mobile banking (2011) Access Africa Technical Learning Series  
• CARE 2012 Briefing notes: Linkages |
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<tr>
<td>Are financial institutions tempted to lend to SGs as a group rather than provide a broad range of services to them?</td>
<td>MEDIUM</td>
<td>MEDIUM</td>
<td>Business cases for FSPs discuss that FSPs are tempted to lend to their clients in many cases in order to be profitable.</td>
<td>• P. Rippey, 2008, ‘Étude sur l’impact des crédits extérieurs sur les groupements et réseaux MMD et les mesures de minimisation des risques’ [Study of the impact of external credit on MMD groups and networks, and measures for minimizing risks], report prepared for CARE Nigeria, Ibadan, Nigeria, January 2008. As seen in SEEP Network (2015). Savings Groups. What are they?</td>
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<td>18. What role can VAs play in a linked SG model? Does this improve acquisition costs? How are they paid and who do they need to be employed by to be most effective?</td>
<td>MEDIUM</td>
<td>MIXED</td>
<td>Some on VAs.</td>
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<tr>
<td>- There is a lot of research available on the village agent model and on the PSP model – some in NGOs' project reports, others academic. However, no figures on acquisition costs, just value judgements e.g. (more cost-effective, less cost-effective).</td>
<td>-</td>
<td>-</td>
<td>Given their importance for sustainable service delivery, studies on different village agent models are vital to NGOs.</td>
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<td>19. Does collecting the 'internal' transactions of SGs provide a more robust set of data for credit scoring than phone records?</td>
<td>NONE</td>
<td>LIMITED</td>
<td>No publicly available research compares the robustness of mobile data usage for assessing credit scores to that of deriving credit scoring from internal transactions in SGs.</td>
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<td>- McEvoy (2014). Enabling financial inclusion through 'alternative data'.</td>
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<td>- Daniel Björkergena and Darrell Grissen (2015) Behavior Revealed in Mobile Phone Usage Predicts Loan Repayment</td>
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<td>- <a href="http://www.openfininc.org/2015/09/24/mobile-credit-scoring-in-emerging-markets/">www.openfininc.org/2015/09/24/mobile-credit-scoring-in-emerging-markets/</a></td>
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<td>- <a href="http://www.eflglobal.com/alternative-credit-scoring-emerging-markets/">www.eflglobal.com/alternative-credit-scoring-emerging-markets/</a></td>
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<td>- <a href="http://www.gsma.com/mobilefordevelopment/programme/mobile-money-programme/are-new-credit-scoring-models-helping-to-extend-access-to-micro-credit-to-unbanked-communities/">www.gsma.com/mobilefordevelopment/programme/mobile-money-programme/are-new-credit-scoring-models-helping-to-extend-access-to-micro-credit-to-unbanked-communities/</a></td>
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### Demand-side learning questions

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Consultancy for Community Managed Savings and Loan Groups: Best Practice Development and Market Linkage Assessment/Pilot Project  
Gash and Odell (2013) 'The Evidence-Based Story of Savings Groups: A Synthesis of Seven Randomized Control Trials'.  

| 21. Can RFIs amortise group set-up and support costs that NGOs can only treat as a cash-based expenditure? | LIMITED                           | LIMITED                             | There is little information on customer acquisition cost for MNOs and FSPs available. NGOs have cost estimates for group formation and/or group linkage. The example of PostBank Uganda will be telling. | • Freedom from Hunger (2015) Pilot Project Report: Using Mobile Money to Link Savings Groups to Financial Institutions. Christian Loubeda, Aly Ouédraogo and Megan Gash. --> data of costs to NGOs for linking them  
Lori Beaman, Dean Karlan and Bram Thuysbaert (October 2014). 'Saving for a (not so) Rainy Day: A Randomized Evaluation of Savings Groups in Mali' --> SIC estimated US$ 20 per household for the facilitation (not linkage).  
Julie Zollmann (February 2009) 'Apples to Apples: Standardizing cost per client calculations to measure and promote efficiency in the expansion of savings-led microfinance'.  
SEEP (2010) Savings Groups: What are they? --> This publication includes an annex illustrating the main differences in approach to service delivery across major facilitators (Aga Khan, CARE, CRS, Oxfam, PACT Plan) (as at 2010), the role of village agents and how facilitating agencies make use of this model.  
FAI (2015) Exploring the business model behind Microsavings --> Not specific to SGs but certainly helpful |

| 22. Do the liquidity management skills of RFIs come more to the fore when they link directly with groups for the savings business compared to when they only get balances via MNOs? | MEDIUM                            | MEDIUM                              | BFA analysis plus anecdotal evidence from CARE’s experience with stand-alone wallets in Tanzania. | • BFA Focus Note: Focus Note 1: Outcompeting the Lockbox – Linking Savings Groups to the Formal Financial Sector (2015)  
BFA Focus Note 2 (2013)  
CARE International (2013) New Models for Linking Savings Groups to formal financial services  
FAI (2015) Exploring the Business Model Behind Microsavings --> Not specific to SGs but certainly helpful |

| 23. Is there any additional bang for the buck from partnering with a DBL institution (MFI, savings bank, community bank, cooperative bank, etc.)? | MEDIUM                            | LIMITED                             | There are no data on aid effectiveness (bang for buck) between DBL institutions and other FSPs. But there is evidence of extra service that DBL institutions provide and some studies on financial inclusion of different models. Also, there are market studies of SG products. | • FAI (2015) Exploring the business model behind Microsavings  
SEEP (2010) Savings Groups: What are they? |
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<tr>
<td>Shareholder-driven commercial institutions?</td>
<td>MEDIUM</td>
<td>NONE</td>
<td>Nothing was found on the provision of services at marginal cost, nor a comparison of low cost offers of DBL institutions versus others. But a table was compiled on group products that included free features. See next question. Note also that this is a question on operational costs of bank accounts. Practitioners could take their cues from the accounts of or experience with individual customers to make conclusions about SGs.</td>
<td>None</td>
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<tr>
<td>25. Are DBL institutions more willing to price services for the more extreme and remote poor at pure marginal cost provided they cover fixed overheads with existing business?</td>
<td>LIMITED</td>
<td>LIMITED</td>
<td>Based on the State of Linkages Report 2016, a table was compiled on group products that included free features and services and companies that offered them. Note also that this is a question on operational costs of bank accounts. Practitioners could take their cues from the accounts of or experience with individual customers to make conclusions about SGs.</td>
<td>Barclays, Plan UK, CARE International (2016) The State of Linkage Report • CARE International (2013) New models for linking services to formal financial services</td>
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**About the SatF consortium**

This programme is being implemented by OPM in collaboration with Bankable Frontier Associates, MicroSave, PSD Consulting, Development Pioneer Consultants and Kadale Consultants.

For more information – and to read the full SatF strategy – visit [www.opml.co.uk/projects/savings-frontier](http://www.opml.co.uk/projects/savings-frontier)

**The MasterCard Foundation**

The MasterCard Foundation works with visionary organisations to provide greater access to education, skills training and financial services for people living in poverty, primarily in Africa. As one of the largest private foundations its work is guided by its mission to advance learning and promote financial inclusion to create an inclusive and equitable world. Based in Toronto, Canada, its independence was established by MasterCard when the Foundation was created in 2006. For more information and to sign up for the Foundation’s newsletter, please visit [www.mastercardfdn.org](http://www.mastercardfdn.org). Follow the Foundation at @MastercardFdn on Twitter.

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Front cover image: SatF team meeting a savings group in Ghana, 2016. Sukhwinder Arora/SatF